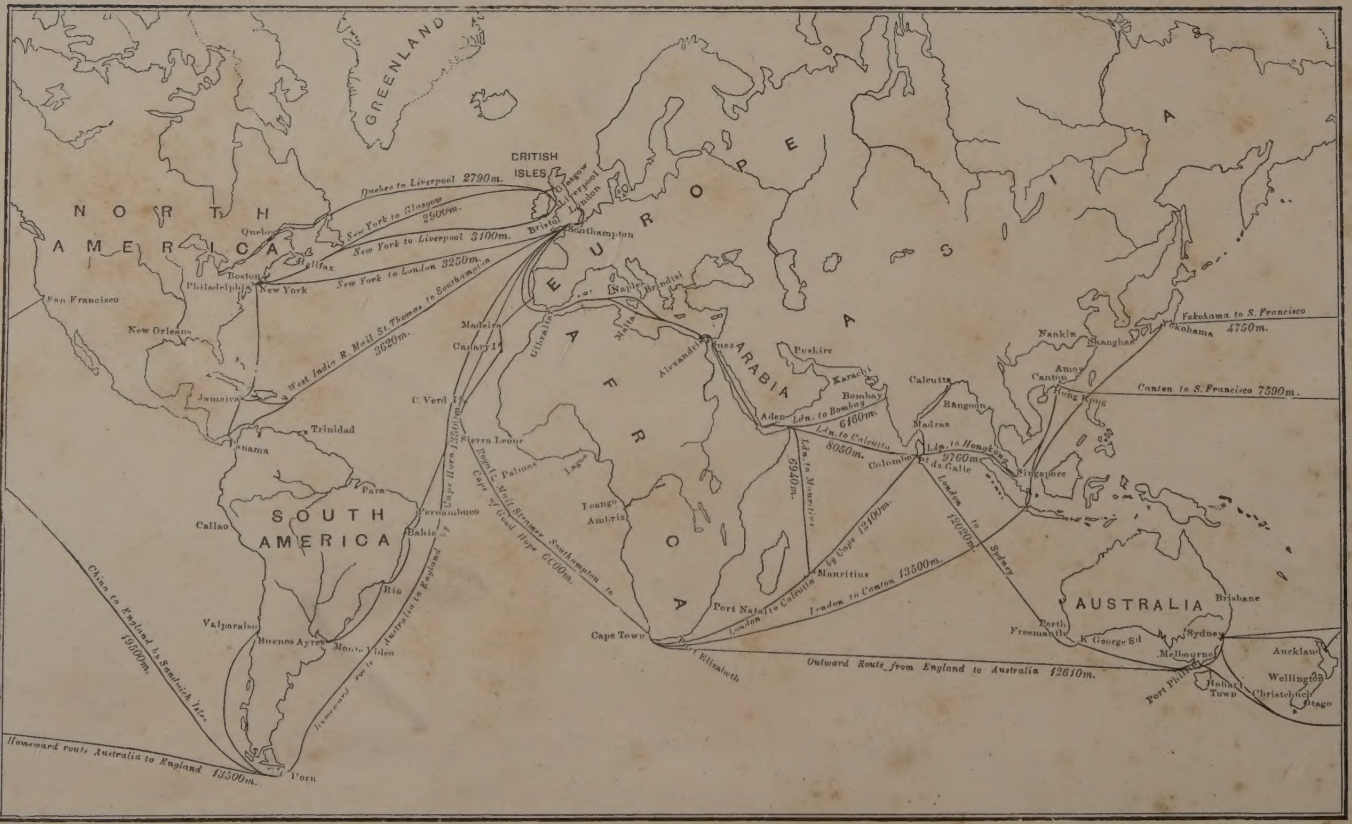
THE CO-OPERATIVE WHOLESALE SOCIETIES, LIMITED

ANNUAL 1900

Map of the World.

SHOWING ROUTES TO BRITISH POSSESSIONS FROM GREAT BRITAIN.



THE

Co-operative Wholesale Societies

LIMITED,

ENGLAND AND SCOTLAND,

ANNUAL

FOR 1900.

PUBLISHED BY
THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED,
1, BALLOON STREET, MANCHESTER;
AND
THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED,
MORRISON STREET, GLASGOW.

MANCHESTER:

PRINTED AND BOUND BY THE

AT THEIR WORKS, LONGSIGHT.

PREFACE.

THE "Annual" for 1900 will be found to differ in some respects from previous issues. The advertisements of the various departments have been omitted, and in their place a short account of the Co-operative Wholesale Society has been inserted, dealing with its origin, growth, and the many spheres of its activities. The number of plates has also been reduced, only those representing the actual property of the Society being retained.

The series of views of the Roden Estate, with the brief article accompanying them, will doubtless prove of considerable interest.

The subjects chosen for treatment have been selected as dealing with questions of present-day importance, and the writers have been permitted the fullest liberty in expressing their views.

Secondary Education is dealt with by Professor Henry de B. Gibbins, an author whose name is familiar to readers of the "Annual," in a style which affords evidence of careful study.

Mr. Porritt, another well-known writer, contributes an illustrated article on "Cotton Factory Life in New England," which is specially worthy the attention of our readers intimate with the conditions of this industry in the mother country.

Company promotion is well known to afford extensive opportunity for fraud, and Mr. Macneill has written on this subject in a vigorous and trenchant style, abounding with facts and opinions of experienced observers.

The principle of the Referendum and its applicability to our own country find an able advocate in Mr. A. M. Thompson, of the *Clarion* staff, who presents his case in explicit and forcible language, while the case for the contrary view is argued with considerable skill by Miss Lilian Tomn. These articles for and against the Referendum are worthy a close perusal by those wishing to form definite opinions on this topic.

Mr. H. W. Macrosty furnishes a very readable article on "Association *versus* Competition," in which the growth of the Co-operative idea is traced as opposed to that of unrestricted competition. The author shows how the latter principle is being abandoned, even by the school which at one time professed devout adherence to it.

Two articles of common use, Sugar and Wool, are exhaustively treated by Mr. J. R. Jackson and Mr. F. Bradbury respectively, in methods that will afford considerable information to any seekers after knowledge in this direction.

The subjects of Taxation and Railway Rates are of perennial importance, and the former, written by Mr. F. Verinder, Secretary of the Land Nationalisation League, is a valuable contribution to the discussion of matters fiscal.

December 19th, 1899. THE COMMITTEE.

LIST OF

MAPS, DIAGRAMS, PREMISES, &c.

CO-OPERATIVE WHOLESALE SOCIETY.

Map of the World.

Diagram—Thirty-six Years' Progress of Co-operation.

„ Thirty-five Years' Progress of the Co-operative Wholesale Society Ltd.

BalloonStreet,Manchester—Registered Offices and Boot and Shoe Warehouse.

Garden Street, Manchester—Grocery Warehouse.

Dantzic Street, Manchester—Drapery Warehouse.

Newcastle Branch, Blandford Street.

„ Grocery, &c., Warehouse.

„ Drapery and Furnishing Warehouse.

„ Quayside Warehouses.

„ Drug, Drysaltery, &c., Department, Pelaw.

London Branch General Office, &c.

„ Grocery, &c.

„ Tea Warehouse.

„ Cocoa and Chocolate Works.

„ Bacon Stoves.

Northampton Saleroom.

Cardiff Saleroom.

Limerick Branch.

Tralee Branch and Creamery.

Armagh Branch.

An Irish Creamery.

Crumpsall Biscuit Works.

Leicester Boot and Shoe Works, Knighton Fields.

„ Boot and Shoe Works, Duns Lane.

Heckmondwike Boot and Shoe Works.

Batley Woollen Cloth Works.

Leeds Clothing Factory.

Dunston Corn Mill.

Irlam Soap Works.

West Hartlepool Lard Refinery.

Middleton Preserve Works.

Longsight Printing Works.

Furniture Factory, Broughton, near Manchester.

Shirt and Mantle Factory, Broughton.

Clothing Factory, Broughton.

Tobacco Factory, Manchester.

Silvertown Corn Mill, London.

Longton Crockery Depôt.

„ „ Showroom.

Calais Offices.

S.S. "Liberty."

S.S. "Equity."

S.S. "Federation."

S.S. "Pioneer."

S.S. "Progress."

LIST OF

MAPS, DIAGRAMS, CITY PLANS, PREMISES, &c.

SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY.

Following page 96.

New Central Offices, Morrison Street, Glasgow.

Paisley Road Premises, Glasgow.

Dundas Street Premises, Glasgow.

Clarence Street Premises, Glasgow.

Links Place Premises, Leith.

Thirty-one Years' Wholesale Distribution in Scotland.

Grange Place Premises, Kilmarnock.

Crookston Street Premises, Glasgow.

Enniskillen Premises.

Chancelot Roller Flour Mills, Edinbro'.

Ettrick Tweed Mills, Selkirk.

Soap Works, Grangemouth.

Productive Works, Shieldhall, Govan, near Glasgow.

LIST OF CONTENTS.

	PAGES.
Co-operative Wholesale Society Limited	1 to 89
Co-operative Union	90 „ 92
Scottish Co-operative Wholesale Society Limited	93 „ 142
The Needs of Secondary Education.—By H. de B. Gibbins, Litt.D., M.A.	143 „ 168
Company Frauds and Parliamentary Inactivity.—By J. G. Swift Macneill, Q.C., M.P.	169 „ 194
The Cotton Mill Towns of New England.—By Edward Porritt. (Illustrated)	195 „ 222
Association *v.* Competition.—By H. W. Macrosty, B.A.	223 „ 252
The Woollen Industry, Historically and Commercially Considered. By F. Bradbury. (Illustrated)	253 „ 284
A Just Basis of Taxation.—By F. Verinder	285 „ 310
For Direct Legislation.—By A. M. Thompson	311 „ 336
The Case Against the Referendum.—By Lilian Tomn	337 „ 356
Railway Rates and Charges.—By J. M. Knights, F.S.S.	357 „ 390
Sugar, Commercially and Botanically Considered.—By J. R. Jackson, A.L.S., &c. (Illustrated by John Allen)	391 „ 420
The Roden Estate	421 „ 424
The late Mr. J. Adams	425 „ 426
The late Mr. Thos. Swann	427 „ 428
Miscellaneous	429 „ 586

ALPHABETICAL INDEX.

	Page. English.	Scottish.	General.
ACTS, Public, of Parliament Passed during the Session of 1899	..	..	445
Acts of Parliament restraining exportation of Tools, &c., used in Cotton, Linen, Woollen, and Silk Manufacture	..	..	521
Accidents, Railway. Proportion of Passengers Killed from Causes beyond their own Control	..	..	455
Adams, the late Mr. J.	..	..	425
Addresses, Telegraphic, List of	30 ..	..	
Administrations in Present Century	..	..	469
Advantages of Membership of Wholesale Societies	..	102 ..	
Annual Value of Property and Profits Assessed, 1877-1897	..	..	524
Association *v.* Competition.—By H. W. Macrosty	..	..	223
Average Minimum Rate per Cent of Discount Charged by Bank of England	..	..	452
Average Price of Consolidated Stock	..	..	451
Average Retail Price of Articles of Domestic Consumption	..	..	537
BANK Holidays	..	..	550
„ Union of Scotland, List of Branches	..	103 ..	
Barometer Instructions	..	..	525
Batley Woollen Mill	19, 76 ..	..	
Births, Marriages, and Deaths, Registers of	..	..	550
Biscuits and Sweets Works	16, 66 ..	..	
Bonus to Labour	..	140 ..	
Boot and Shoe Department	55, 87 ..	116 ..	
Boot and Shoe Factory	..	126 ..	
Bradbury, F.—The Woollen Industry	..	..	253
Broughton Cabinet Factory	21, 78 ..	..	
Brush Factory	..	131 ..	
CABINET, The	..	..	470
Cabinet Workshop	..	128 ..	
Calendar for 1900	..	..	551
Cash Arrangements	..	103 ..	

ALPHABETICAL INDEX.

	Page. English.	Scottish.	General.
Census, The Indian	..	..	506
Chronology of the Wholesale Society	27 ..	..	
Civil Service Supply Stores, Sales of	..	..	444
Coming Events in connection with the Wholesale Society in 1900	26 ..	..	
Committees, &c., List of	4 ..	97 ..	
Committees, Past Members of	32 ..	.	
Committee, Members of, who have Died during Office	35 ..	..	
Company Frauds and Parliamentary Inactivity.—By J. G. Swift Macneill	..	..	169
Confectionery Works	..	134 ..	
Congresses, Co-operative	..	..	36
Consolidated Stock, Average Price of	..	..	451
Contributions which have appeared in "The Co-operative Wholesale Societies' Annual" from 1885 to 1900	..	..	564
Co-operative Congresses	..	..	36
„ „ Papers read at	..	..	38
„ Progress, 1862 to 1897 (United Kingdom)	..	..	423
„ Societies each with Trade over £200,000 per year	..	..	440
„ Societies each with Trade over £100,000 per year	..	..	442
„ Societies, Summary of Law relating to	..	..	91
„ Union: Its Principles and Constitution	..	..	90

Co-operative Wholesale Societies:—

Advantages of Membership	..	102 ..	
Biscuits, Sweets, &c., Works, Crumpsall	16, 66 ..	..	
Bonus to Labour	..	140 ..	
Boot and Shoe Department	55, 87 ..	116 ..	
„ „ Factory	..	126 ..	
Brush Factory	..	131 ..	
Business Notices	..	99 ..	
Cabinet Workshop	21, 78 ..	128 ..	
Chancelot Flour Mills	..	136 ..	
Chronology	27 ..	..	
Coming Events in connection with the Wholesale Society in 1900	26 ..	..	
Committees, Auditors, and Scrutineers	4 ..	97 ..	
Committees, Past Members of	32 ..	..	
Committee, Members of, who Died during Office	35 ..	..	
Confectionery Works	..	134 ..	
Corn Mill, Silvertown	13 ..	..	
Corset Factory	22 ..	..	

ALPHABETICAL INDEX.

	Page. English.	Scottish.	General.
Co-operative Wholesale Societies:—			
Crockery Department, Longton	82		
Drapery Department	11, 53, 87	114	
Dunston Corn Mill	21, 73		
Employés in Departments	7	138	
Ettrick Tweed Mills		137	
Flannel Mills	25, 81		
Furnishing Department	56, 87		
Furniture „		118	
Grocery Department	52, 86	108–113	
Hosiery Factory		130	
Lard Refinery	25, 84		
London Branch	12, 61–64, 89		
Mantle Factory		125	
Newcastle Branch	11, 57–60, 88–89		
Officers and Departments	5	98	
Offices	1	94	
Preserve Works	17, 84	133	
Printing Workshop	23, 80	132	
Progress of the Wholesale Societies	50	104	
Shirt Factory	22	122	
Shoe Works, Leicester	17, 68		
„ Heckmondwike	19, 70–72		
Slop Factory		124	
Soap Works, Irlam and Durham	18, 74		
Tailoring Factory	20, 23, 65, 79	120	
Tea, Coffee, and Cocoa Department	14		
Telegraphic Addresses	30		
Telephonic Communication	31		
Tobacco Factory	24, 81	135	
Trade Terms, Conditions of Membership, &c.		101	
Woollen Department	54, 87		
„ Mills, Batley	19, 76		
Corn Mill, Dunston	21, 73		
Cotton Mill Towns of New England.—By E. Porritt			195
Crockery Department	82		
Crumpsall Biscuit Works	16, 66		
Dealings with Land			453
Death Duties, The			456
Departments and Offices of the Wholesale Society	1	94	
„ Officers of „ „	5	98	
„ No. of Employés in each „	7	138	
„ of the Wholesale—Progress of „	50	104	

ALPHABETICAL INDEX.

	Page. English.	Scottish.	General.
Direct Legislation, For.—By A. M. Thompson	..	..	311
Discount, Average Minimum Rate per Cent of	..	..	452
Drapery Department	53, 87 ..	114 ..	
Dunston Corn Mill	21, 73 ..	..	
Duties, Import, in the United Kingdom	..	..	448
„ Stamp, Taxes, Excise	..	..	511
ECLIPSES	..	..	550
Education, The Needs of Secondary.—By H. de B. Gibbins	..	..	143
Employés, Number of	7 ..	138 ..	
English Mile compared with other European Measures	..	..	544
English Money, Table showing Sums Payable in—on Money Orders Issued in Foreign Countries, &c.	..	..	523
Expectation of Life	..	..	464
FLANNEL MILLS	25, 81 ..	..	
Flour Mill	21, 73 ..	136 ..	
Foreign Currencies, Table Showing Sums Payable in—on Money Orders issued in the United Kingdom	..	..	522
Foreign Moneys and their English Equivalents	..	..	504
Furnishing Department of Wholesale Society	56, 87 ..	..	
Furniture Department of Wholesale Society	..	118 ..	
GENERAL Election, 1895, Expenses of	..	..	502
Gibbins, H. de B.—The Needs of Secondary Education	..	..	143
Goole Tide Table	..	..	540
Grocery Departments, Wholesale Society	52, 86 ..	108–113 ..	
HECKMONDWIKE Shoe Works	19, 70–72 ..	..	
Holidays, Bank	..	..	550
Hosiery Factory	..	130 ..	
House of Commons—List of Members	..	..	472
„ „ Professions of Members	..	..	501
IMPORT Duties in the United Kingdom	..	..	448
Income Tax Rates from its First Imposition	..	..	450
Income and Expenditure of the United Kingdom, year ending March 31st, 1899	..	..	447

ALPHABETICAL INDEX.

	Page. English.	Scottish.	General.
Indian Census, The	..	..	506
Inland Book Post	..	..	518
„ Parcel Post, Posting of Parcels	..	..	519
„ Parcels, Compensation for Loss and Damage of	..	..	517
„ Registered Newspapers, Postage on	..	..	520
Instructions, Barometer	..	..	525
Introductory	v. ..	96 ..	
JACKSON, John R., A.L.S.—Sugar, Commercially and Botanically considered	..	..	391
KNIGHTS, J. M.—Railway Rates and Charges	..	..	357
LAND, Dealings with	..	..	453
Lard Refinery, West Hartlepool	25, 84 ..	..	
Law Relating to Societies, Summary of the	..	..	91
Law Sittings	..	..	550
Leeds Clothing Department	20, 65 ..	..	
Leicester Shoe Works	17, 68 ..	..	
Life, Expectation of	..	..	464
Liverpool Tide Table	..	..	538
London Branch	12, 61–64, 89 ..	..	
Longton Crockery Department	82 ..	..	
MANTLE Factory	..	125 ..	
Macneill, J. G. S.—Company Frauds and Parliamentary Inactivity	..	..	169
Macrosty, H. W.—Association *v.* Competition	..	..	223
Members of Committee who have Died during time of Office	35 ..	..	
Membership of Wholesale Society, Advantages of	.. ..	102 ..	
Meteorological Tables	..	..	528
Mile, The English, compared with other European Measures	..	..	544
Ministry, The Salisbury	..	..	470
Moneys, Foreign, and their English Equivalents	..	..	504
NEWCASTLE Branch	11, 57–60, 88, 89 ..	..	
Notices, Wholesale Society's Business	..	99 ..	

ALPHABETICAL INDEX.

	Page. English.	Page. Scottish.	Page. General.
OFFICERS of the Co-operative Wholesale	5	98	
PARLIAMENTS of the United Kingdom			469
Past Members of Committees	32		
Porritt, E.—Cotton Mill Towns of New England			195
Postal Information			515
Preface	v.	96	
Preserve Works	17, 84	133	
Presidents of the United States of America			510
Price of Three per cent Consolidated Stock			451
Prime Ministers since 1834			471
Principal Articles of the Calendar for the Year 1900			549
„ Events in connection with the Wholesale Society	27		
Principles and Constitution of the Co-operative Union			90
Printing Workshop	23, 80	132	
Professions of Members of the House of Commons			501
Progress of the Wholesale Societies	50	104	
Progress of Co-operation (United Kingdom)			429
Property and Profits—Total Annual Assessed Value			524
Public Acts of Parliament Passed during the Session of 1899			445
Public Income and Expenditure of the United Kingdom for the Year ending March 31st, 1899			447
QUEEN and Royal Family, The			468
RAILWAY Accidents, Proportion of Passengers Killed, &c.			455
Railway Rates and Charges.—By J. M. Knights			357
Ready Reckoner and Wages Table			548
Referendum, the Case against the.—By Lilian Tomn.			337
Registers of Births, Marriages, and Deaths			550
Remarks on the Weather			531
Royal Family, The Queen and			468
Rules by which the Personal Estates of Persons Dying Intestate are Distributed			459
Rules of Division according to the Law of Scotland of the Movable Estate of a Person who has Died Intestate			461
Roden Estate			421
SALISBURY Ministry, The			470
Scottish Wholesale Society		93–142	

ALPHABETICAL INDEX.

	Page. English.	Scottish.	General.
Shirt Factory	22	122	
Shoe Works, Leicester	17, 68		
„ Heckmondwike	19, 70–72		
Silvertown Corn Mill, C.W.S.	13		
Slop Factory		124	
Soap Works, Irlam and Durham	18, 74		
Societies—Co-operative, each with Trade over £200,000 per year			440
Societies—Co-operative, each with Trade over £100,000 per year			442
Stamp, &c., Duties			511
Statistics of Co-operative Wholesale Society	49		
Sweets Works, Crumpsall	16, 66		
Sugar, Commercially and Botanically Considered.—By J. R. Jackson			391
Swann, the late Mr. Thos.			427
TABLE Showing Sums Payable in Foreign Currencies on Money Orders Issued in United Kingdom			522
Table Showing Sums Payable in English Money on Money Orders Issued in Foreign Countries, &c.			523
Table Showing the Number of Days between any Two Dates			568
Table Showing Number of Days from any Day of one Month to same Day of any other Month			545
Tailoring Factory	20, 23, 65, 79	120	
Taxation, a Just Basis of.—By F. Verinder			285
Tea and Coffee Department of Wholesale Society	14		
Telegraphic Addresses	30		
Telephone Numbers	31		
Terms and Abbreviations Commonly Used in Business			546
Terms and Conditions of Membership of Wholesale Society		101	
Thompson, A. M.—For Direct Legislation			311
Tomn, Lilian.—The Case against the Referendum			337
Tide Table, Liverpool			538
„ Goole			540
Time all over the World			524
Tobacco Factory	24, 81	135	
UNION Bank of Scotland, List of Branches		103	
„ Co-operative, its Principles and an Account of			90
United Kingdom, the Public Income and Expenditure, year ending March 31st, 1899			447

ALPHABETICAL INDEX.

	Page. English.	Scottish.	General.
United Kingdom, Co-operative Progress in the years 1862–97	..	..	429
United Kingdom, Import Duties in the	..	..	448
„ „ Parliaments of the	..	..	469
„ States, Presidents of	..	..	510
VERINDER, F.—A Just Basis of Taxation	..	..	285
WAGES Table and Ready Reckoner	..	..	548
Weather, Remarks on the	..	..	531
Weights and Measures	..	..	547
West Hartlepool Lard Refinery	25, 84	..	..
Wholesale Society	1–89	.. 93–142	..
Woollen Cloth Department	54, 87	..	..
„ Industry.—By F. Bradbury	..	..	253
„ Mill, Batley	19, 76	..	..

THIRTY-SIX YEARS' PROGRESS

OF THE

CO-OPERATIVE SOCIETIES

IN THE

UNITED KINGDOM,

FROM

1862 TO 1897.

THIRTY-SIX YEARS' PROGRESS

OF

Co-operative Societies in the United Kingdom.

Years.	Sales. £	Years.	Sales. £
1862	2,333,523	1880	23,248,314
1863	2,673,778	1881	24,945,063
1864	2,836,606	1882	27,541,212
1865	3,373,847	1883	29,336,028
1866	4,462,676	1884	30,424,101
1867	6,001,153	1885	31,305,910
1868	7,122,360	1886	32,730,745
1869	7,353,363	1887	34,483,771
1870	8,201,685	1888	37,793,903
1871	9,463,771	1889	40,674,673
1872	13,012,120	1890	43,731,669
1873	15,639,714	1891	49,024,171
1874	16,374,053	1892	51,060,854
1875	18,499,901	1893	51,803,836
1876	19,921,054	1894	52,110,800
1877	21,390,447	1895	55,100,249
1878	21,402,219	1896	59,951,635
1879	20,382,772	1897	64,956,049

TOTAL SALES IN THE THIRTY-SIX YEARS, 1862 TO 1897. ... **£940,668,025.**

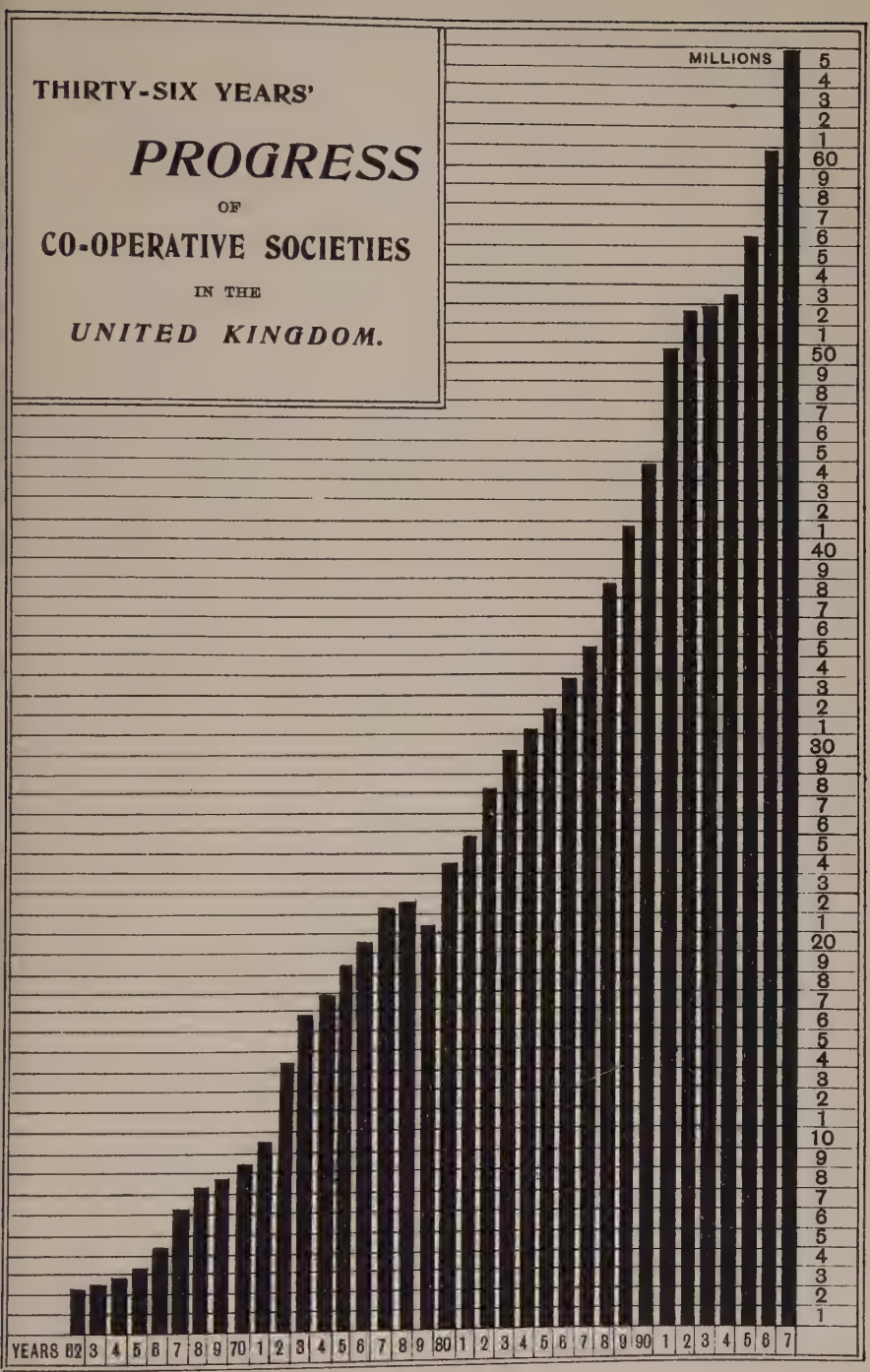
TOTAL PROFITS IN THE THIRTY-SIX YEARS, 1862 TO 1897. ... **84,601,452.**

STATISTICAL POSITION OF CO-OPERATIVE SOCIETIES IN THE UNITED KINGDOM,

DECEMBER 31ST, 1897.

Compiled from the Returns made by Societies to the Registrar and Co-operative Union.

		£
Number of Members	1,627,135	
Share Capital		19,510,007
Loan Capital		9,137,077
Sales for 1897		64,956,049
Net Profits for 1897		6,535,861
Devoted to Education, 1897		50,302


THIRTY-SIX YEARS'
PROGRESS
OF
CO-OPERATIVE SOCIETIES
IN THE
UNITED KINGDOM.
MILLIONS
5 4 3 2 1 60 9 8 7 6 5 4 3 2 1 50 9 8 7 6 5 4 3 2 1 40 9 8 7 6 5 4 3 2 1 30 9 8 7 6 5 4 3 2 1 20 9 8 7 6 5 4 3 2 1 10 9 8 7 6 5 4 3 2 1
YEARS 62 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 80 1 2 3 4 5 6 7 8 9 90 1 2 3 4 5 6 7

THIRTY-FIVE YEARS' PROGRESS

OF THE

CO-OPERATIVE WHOLESALE SOCIETY

LIMITED,

FROM

1864 TO 1898.

THIRTY-FIVE YEARS' PROGRESS

OF THE

Co-operative Wholesale Society Limited.

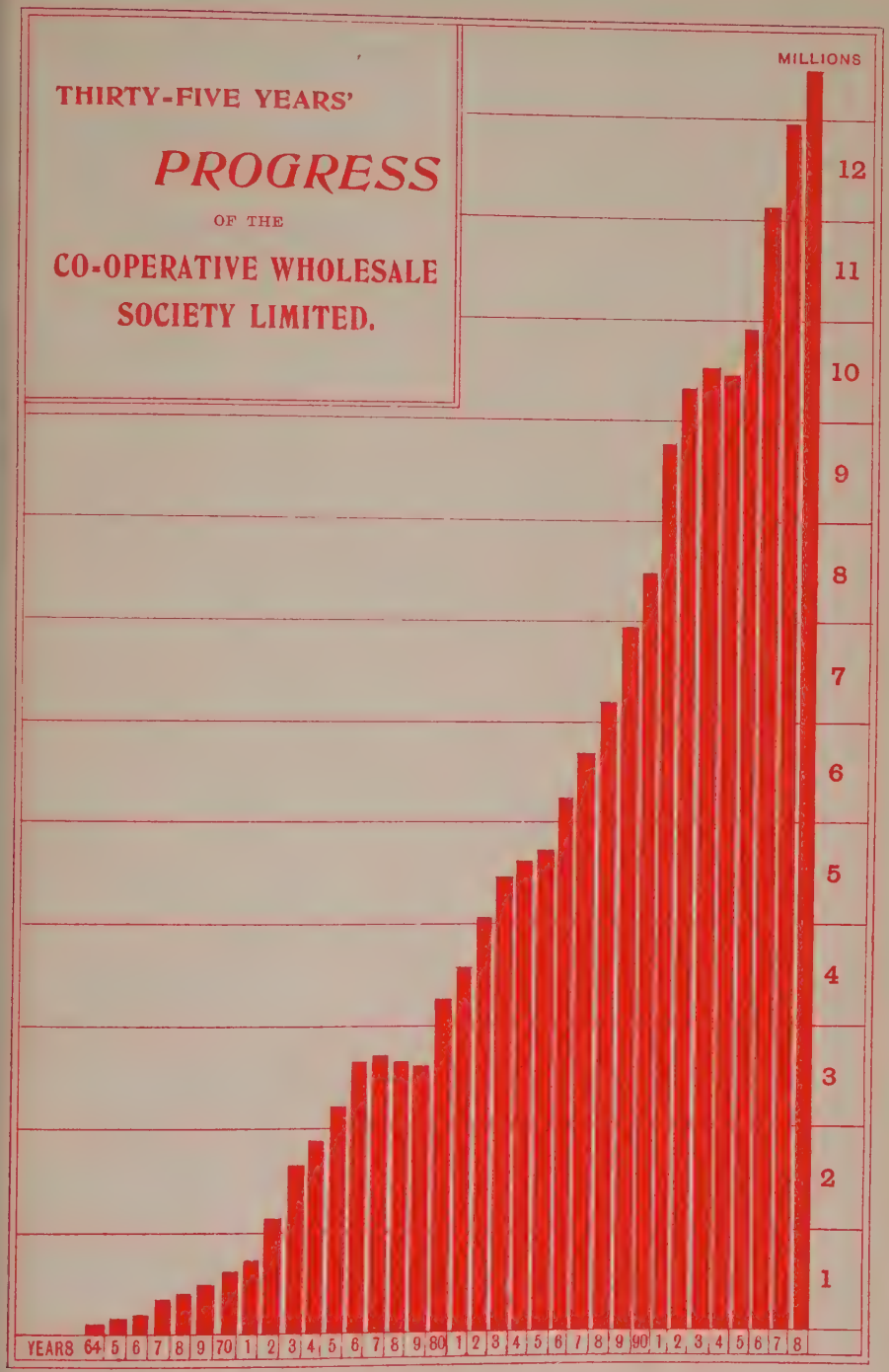
Years.	Sales. £	Years.	Sales. £
1864 (30 Weeks)	51,857	1882	4,038,238
1865	120,754	1883	4,546,889
1866	175,489	1884 (53 Weeks)	4,675,371
1867 (65 Weeks)	331,744	1885	4,793,151
1868	412,240	1886	5,223,179
1869	507,217	1887	5,713,235
1870 (53 Weeks)	677,734	1888	6,200,074
1871	758,764	1889 (53 Weeks)	7,028,944
1872	1,153,132	1890	7,429,073
1873	1,636,950	1891	8,766,430
1874	1,964,829	1892	9,300,904
1875	2,247,395	1893	9,526,167
1876 (53 Weeks)	2,697,366	1894	9,443,938
1877	2,827,052	1895 (53 Weeks)	10,141,917
1878	2,705,625	1896	11,115,056
1879 (50 Weeks)	2,645,331	1897	11,920,143
1880	3,339,681	1898	12,574,748
1881	3,574,095		

Total Sales in the Thirty-five Years, 1864 to 1898.	...	**£160,264,712.**
Total Profits in the Thirty-five Years, 1864 to 1898.	...	**2,209,539.**

STATISTICAL POSITION OF THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED,

December 24th, 1898.

		£
Number of Societies holding Shares	1,063	
Number of Members belonging to Shareholders,	1,118,158	
Share Capital (Paid up)...		775,536
Loans and Deposits...		1,297,182
Reserve Fund—Trade and Bank		152,460
Insurance Fund		382,620
Sales for the Year 1898...		12,574,748
Net Profits for Year 1898		231,256


THIRTY-FIVE YEARS'
PROGRESS
OF THE
CO-OPERATIVE WHOLESALE
SOCIETY LIMITED.
MILLIONS
12
11
10
9
8
7
6
5
4
3
2
1
YEARS 64 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 80 1 2 3 4 5 6 7 8 9 90 1 2 3 4 5 6 7 8

BUSINESS PREMISES

OWNED BY THE

CO-OPERATIVE WHOLESALE SOCIETY

LIMITED.

MANCHESTER:

REGISTERED OFFICES, BANK, CENTRAL GROCERY AND PROVISION, BOOT AND SHOE, AND FURNISHING WAREHOUSES,

BALLOON STREET AND HOLGATE STREET. *(See pages 9, 50, 52, 55, 56, and 86.)*

MANCHESTER:

CENTRAL GROCERY AND PROVISION AND BOOT AND SHOE WAREHOUSES, BALLOON STREET AND GARDEN STREET.

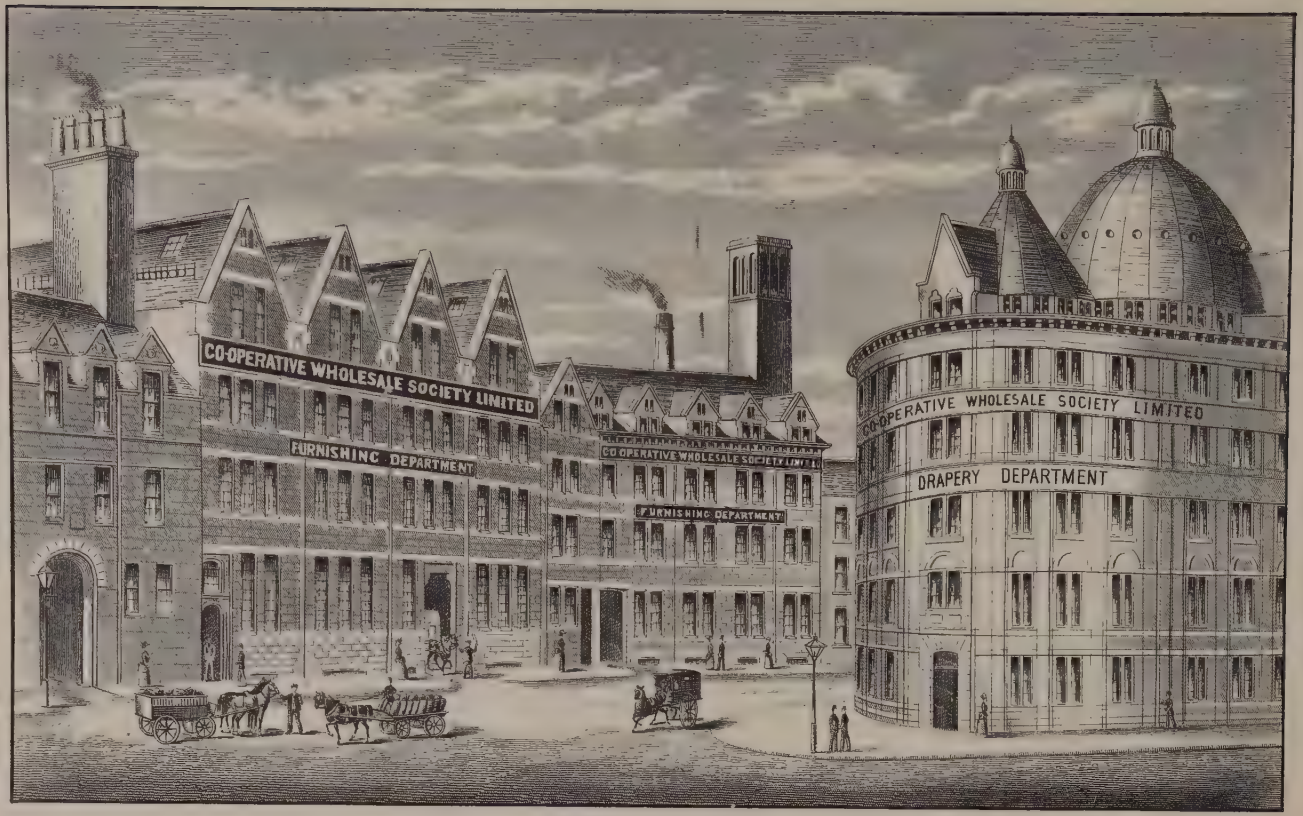
(See pages 9, 52, 55, and 86.)

MANCHESTER DRAPERY WAREHOUSES, DANTZIC STREET.

(See pages 11, 53, and 87.)

NEWCASTLE BRANCH:
GROCERY, OFFICES, BOARDROOM, BANK, &c., WEST BLANDFORD STREET.
(See pages 11, 57, and 88.)

NEWCASTLE BRANCH:
DRAPERY AND BOOT AND SHOE WAREHOUSES, WATERLOO STREET.
(See pages 58 and 59 to 88.)

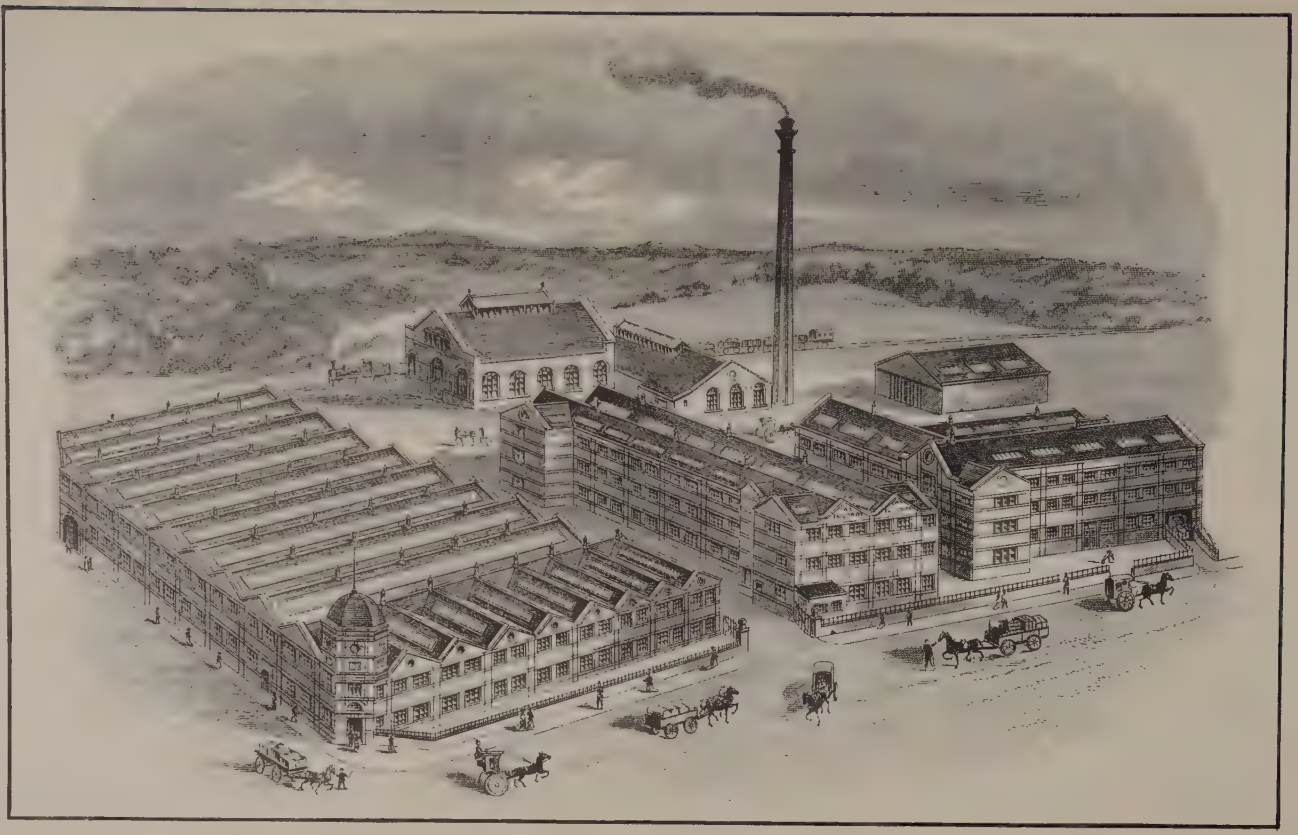


NEWCASTLE BRANCH:

DRAPERY AND FURNISHING WAREHOUSES, THORNTON STREET.

(See pages 58, 60, 88, and 89.)

NEWCASTLE BRANCH: QUAYSIDE WAREHOUSES.



NEWCASTLE BRANCH:
DRUG AND DRYSALTERY, TAILORING AND CABINET WORKS, PELAW.

LONDON BRANCH:

GENERAL OFFICES, GROCERY, DRAPERY, BOOT AND SHOE, AND FURNISHING DEPARTMENTS, AND CO-OPERATIVE HALL, LEMAN STREET

(See pages 12, 61 to 64, and 89.)

LONDON BRANCH PREMISES: GROCERY, DRAPERY, BOOTS, AND FURNISHING.

LONDON TEA WAREHOUSE, LEMAN STREET.

(See page 14.)

LONDON COCOA AND CHOCOLATE WORKS, 116, LEMAN STREET.

(See page 15.)

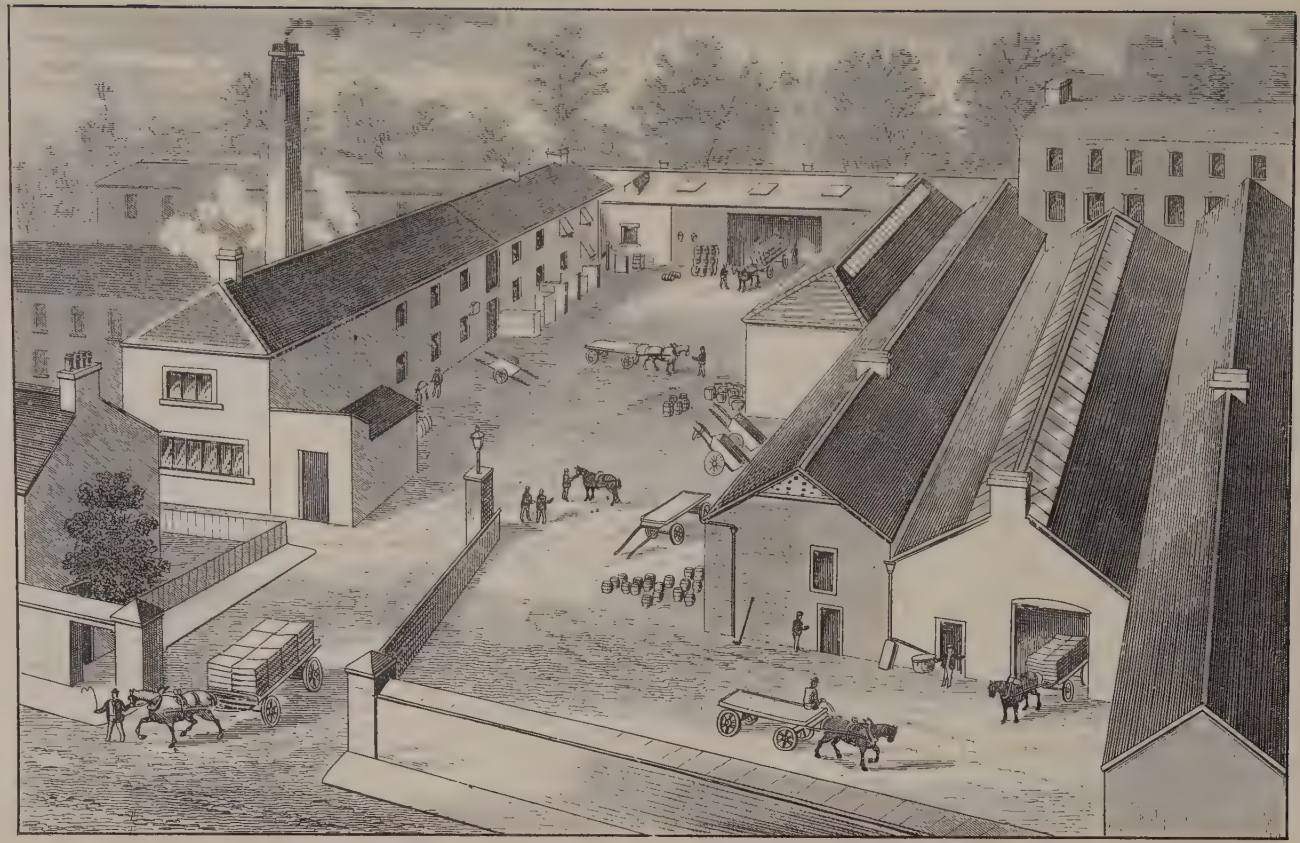
LONDON BACON STOVES, 118, LEMAN STREET.

DEPOT AND SALEROOM, GUILDHALL ROAD, NORTHAMPTON.

CARDIFF SALEROOM.

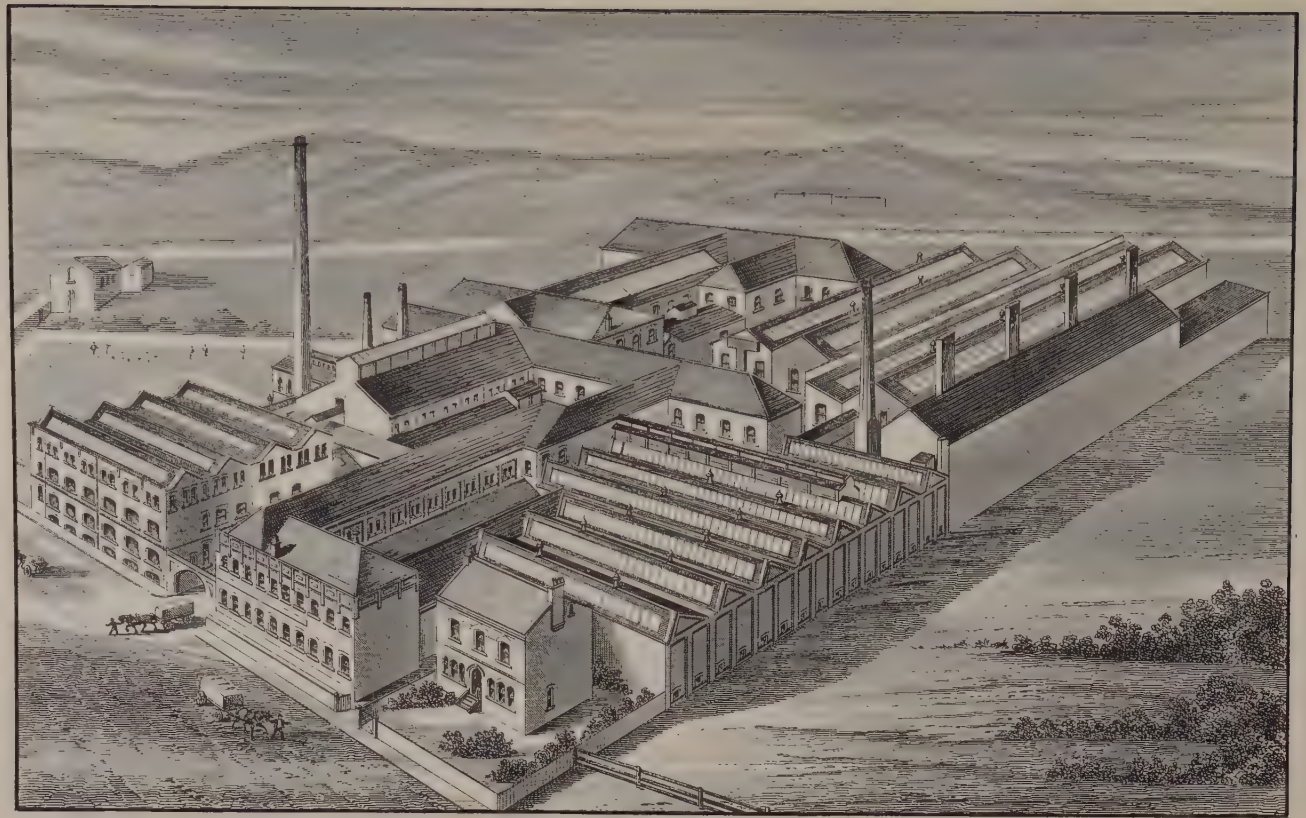
LIMERICK BRANCH.

TRALEE BRANCH AND CREAMERY.



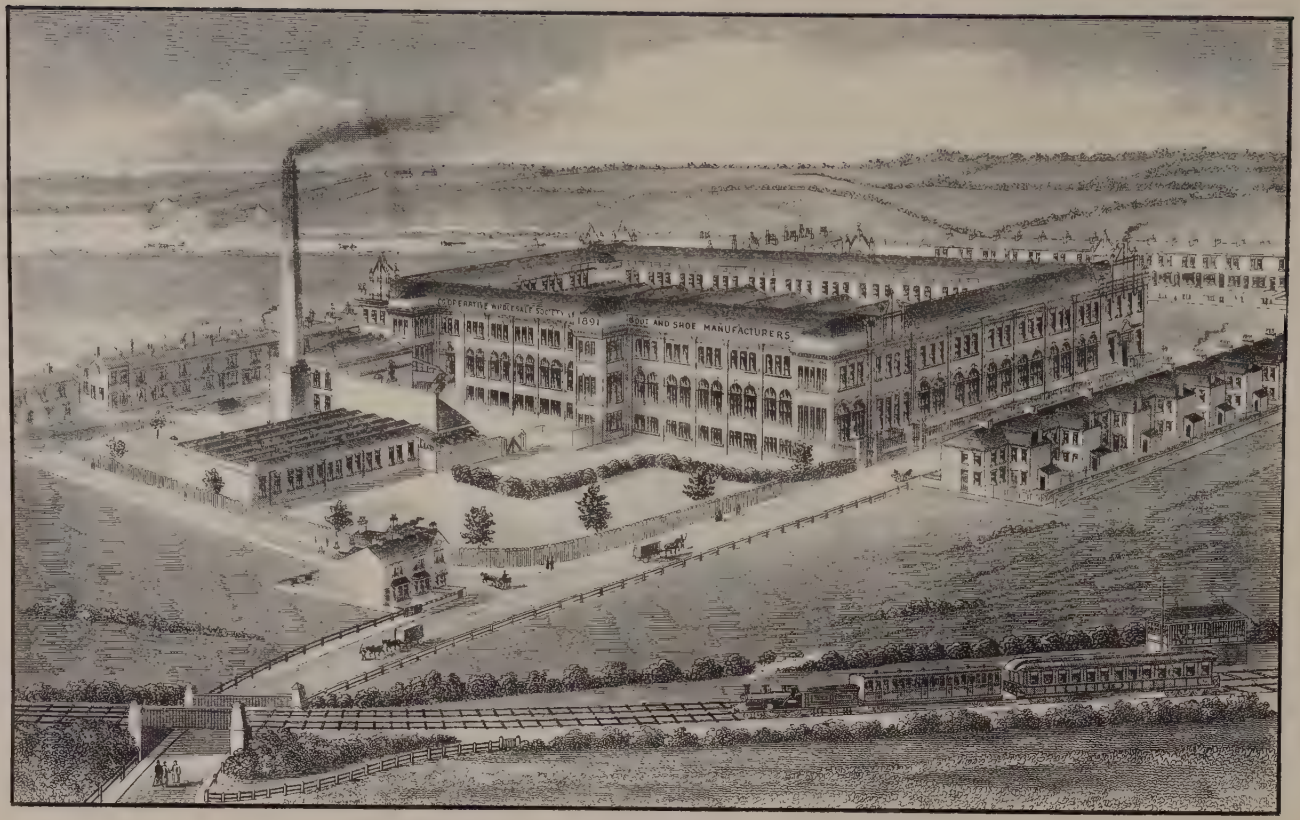
ARMAGH BRANCH.

AN IRISH CREAMERY.



CRUMPSALL BISCUIT WORKS.

(See pages 16 and 66.)



WHEATSHEAF BOOT AND SHOE WORKS, KNIGHTON FIELDS, LEICESTER.

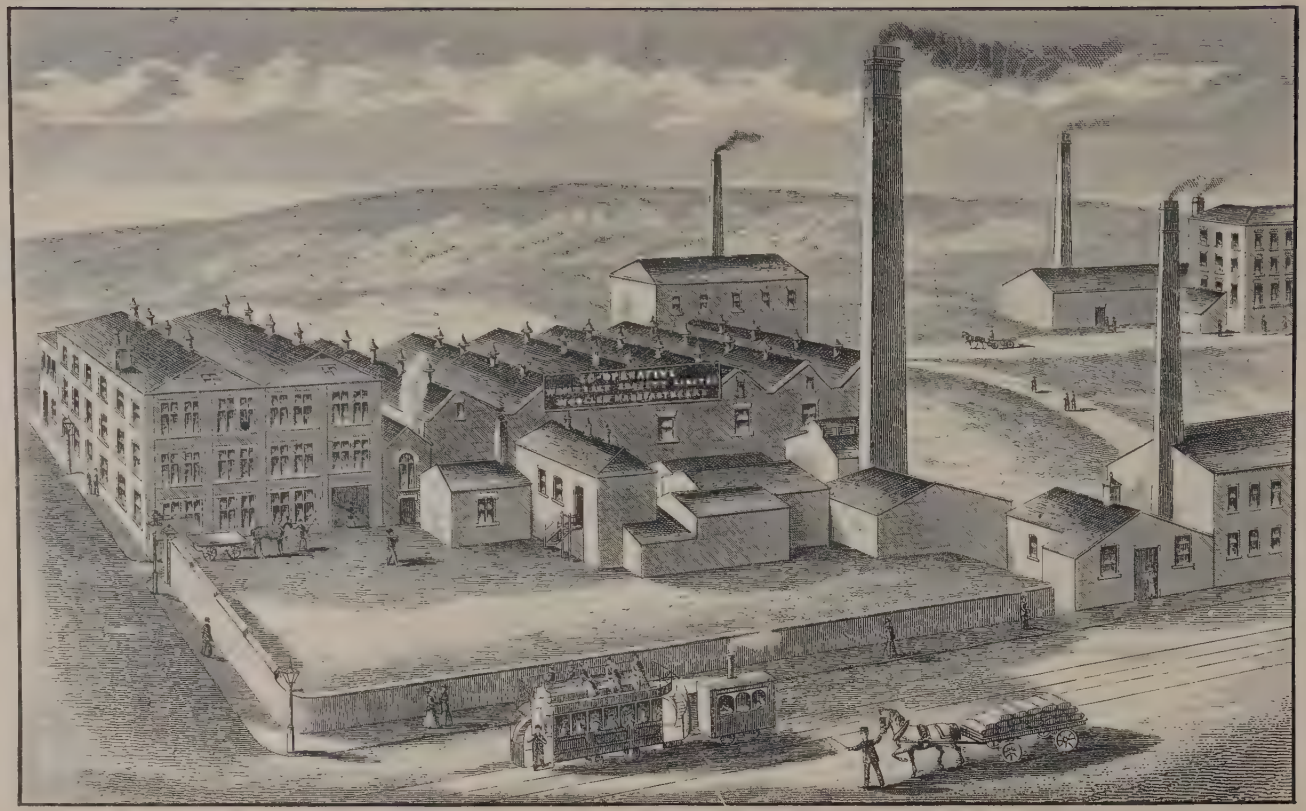
(See pages 17 and 68.)

LEICESTER BOOT AND SHOE WORKS. DUNS LANE.

(See pages 18 and 68.)

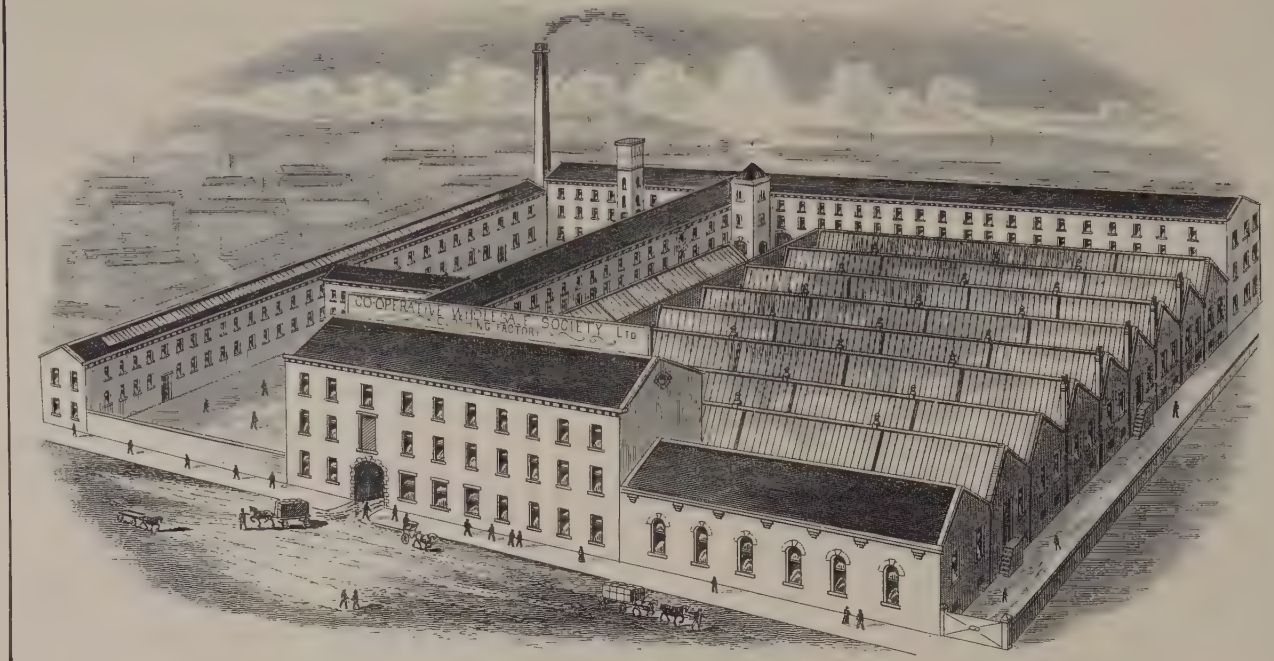
HECKMONDWIKE BOOT AND SHOE AND CURRYING WORKS.

(See pages 19 and 70 to 72.)



LIVINGSTONE MILL, BATLEY. WOOLLEN CLOTH WORKS.

(See pages 19 and 76.)

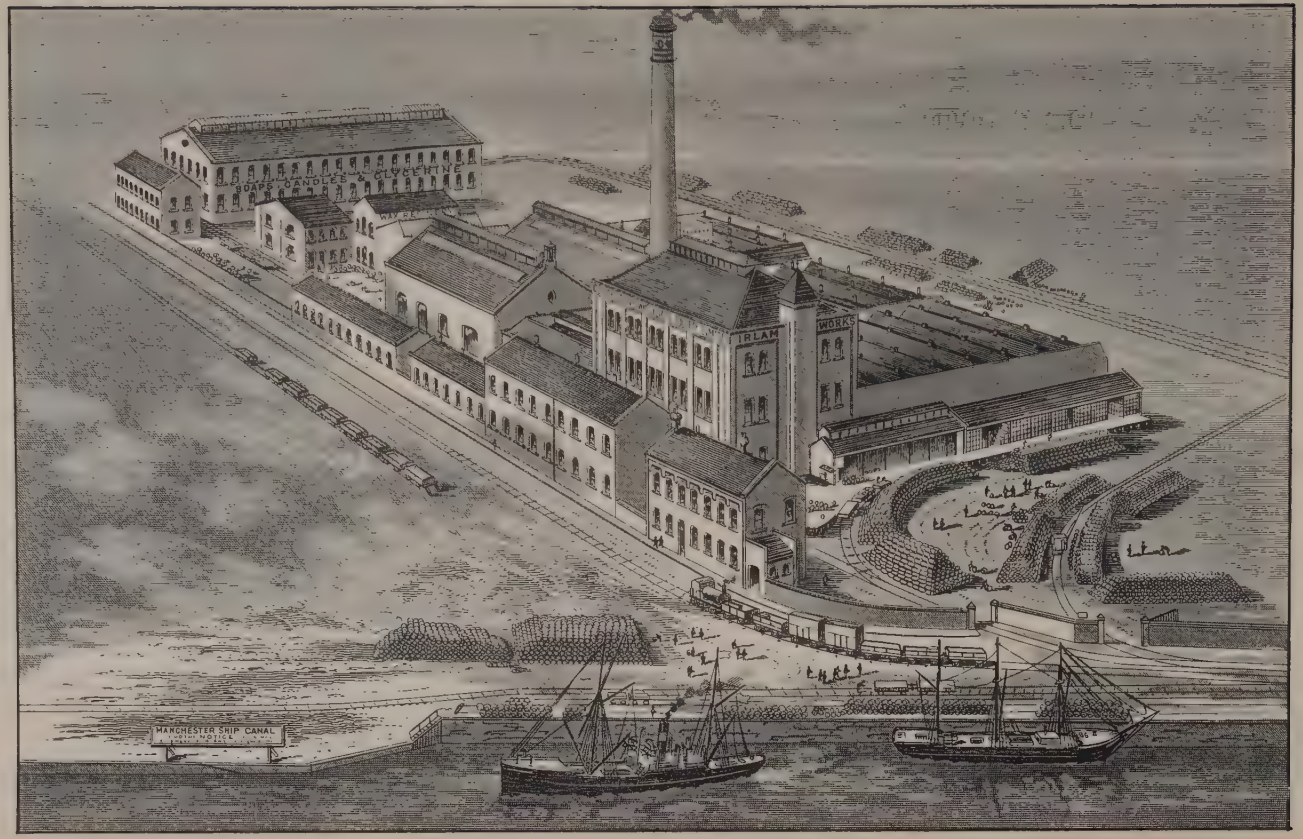


LEEDS CLOTHING FACTORY.

(See pages 20 and 65.)

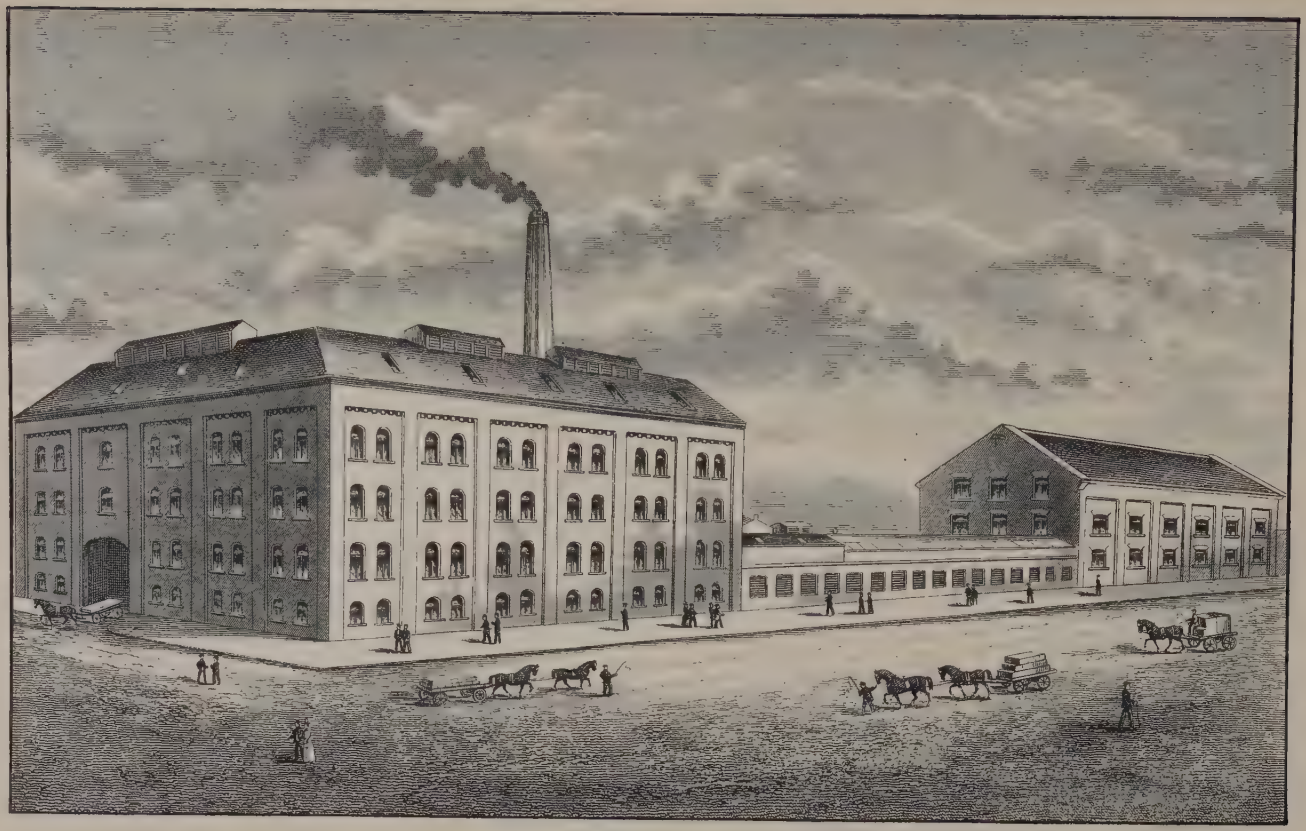
DUNSTON CORN MILL.

(See pages 21 and 73.)



IRLAM SOAP WORKS.

(See pages 18 and 74.)

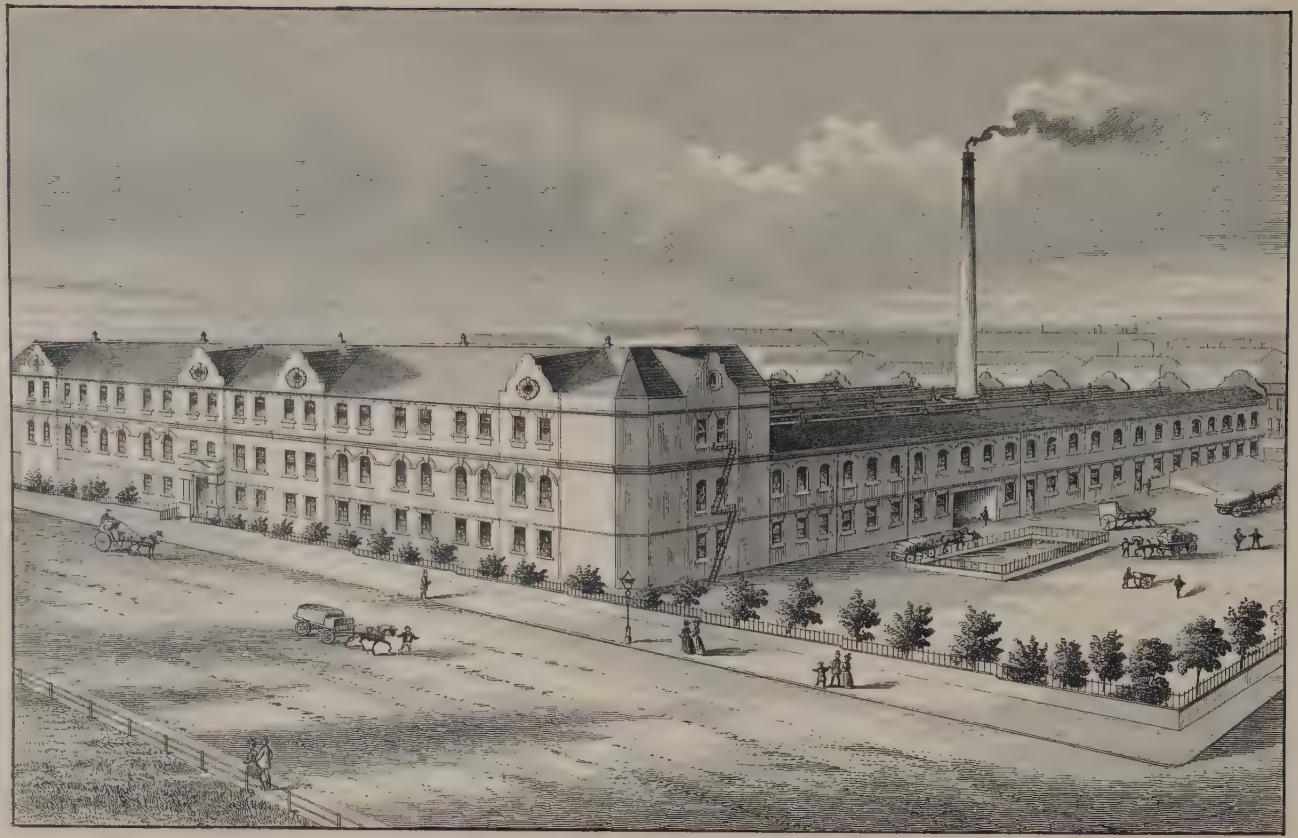


WEST HARTLEPOOL LARD REFINERY.

(See pages 25 and 84.)

MIDDLETON PRESERVE AND PICKLE WORKS.

(See pages 17 and 84.)

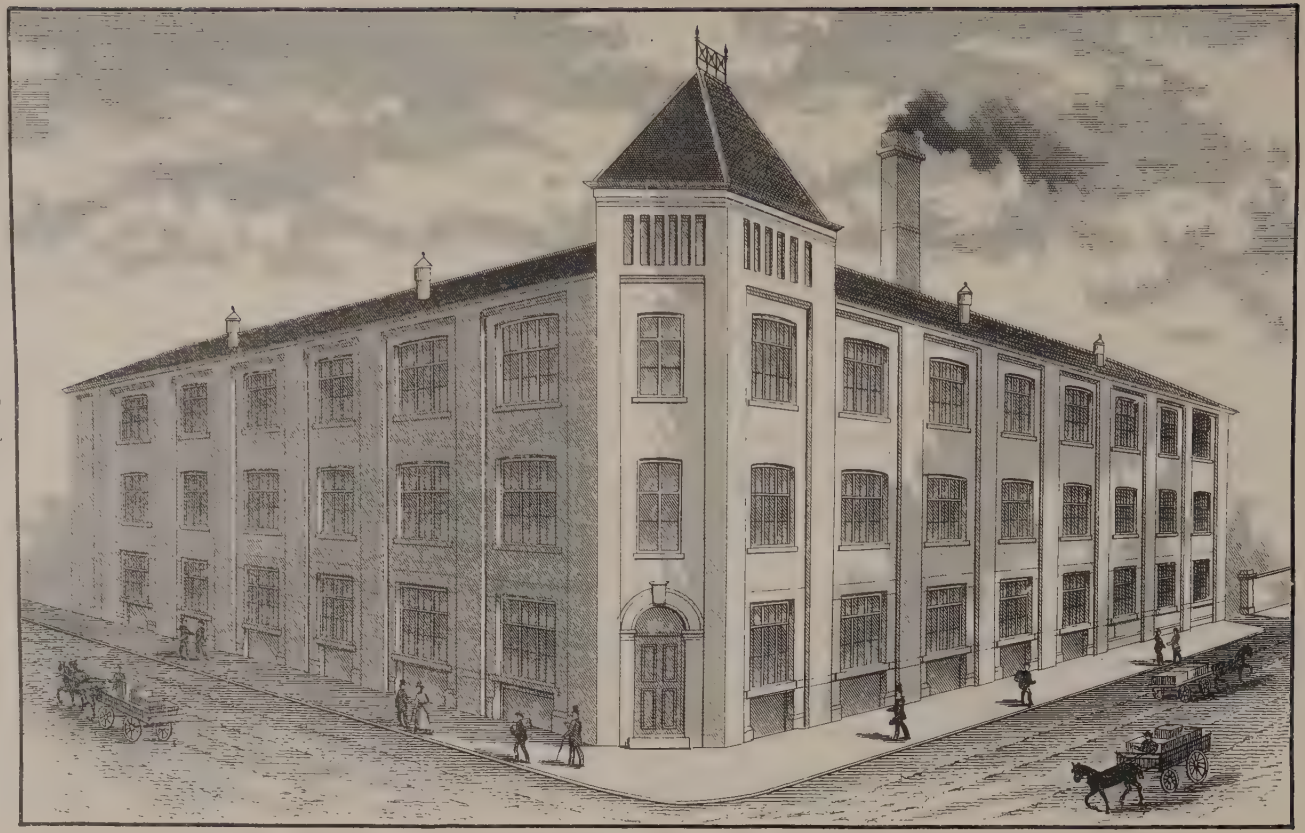


LONGSIGHT PRINTING WORKS.

(See pages 23 and 80.)

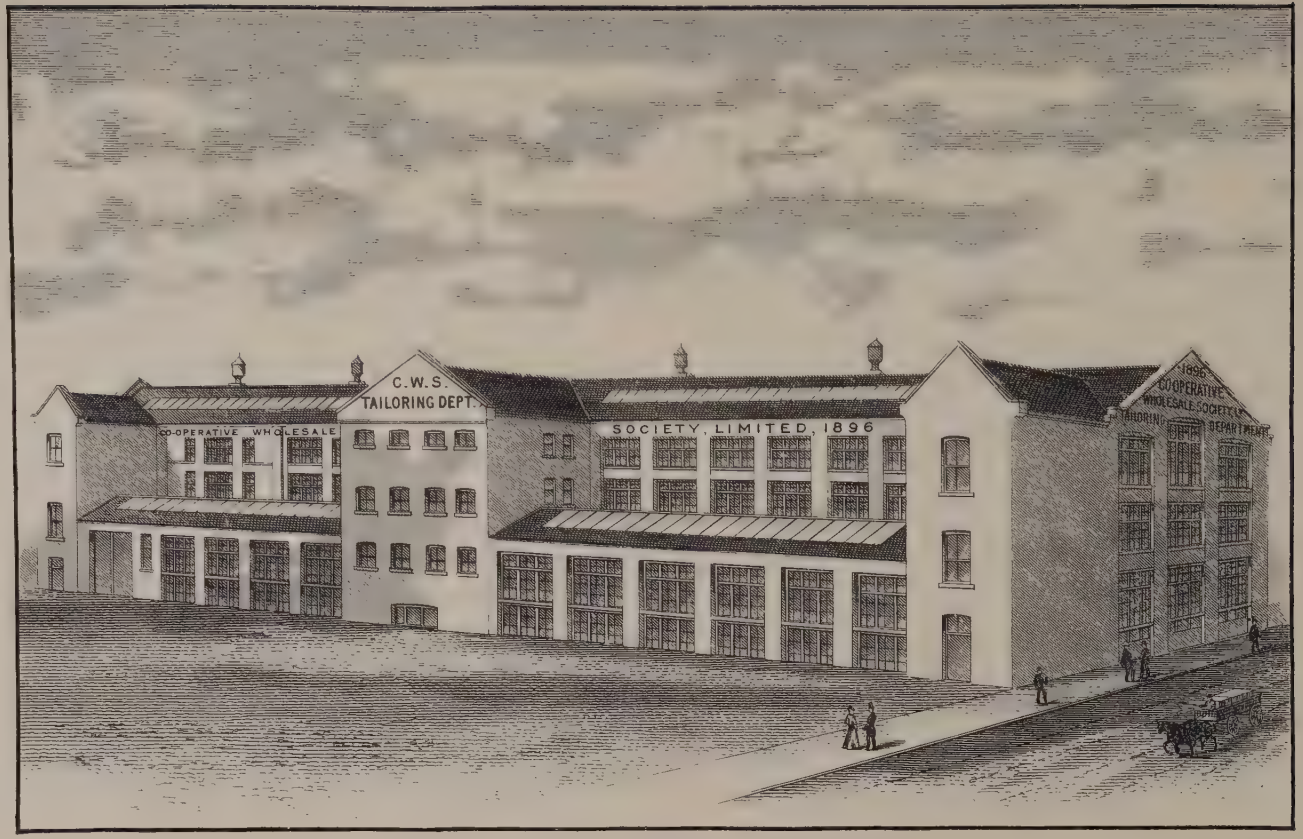
FURNITURE FACTORY, BROUGHTON, NEAR MANCHESTER.

(See pages 21 and 78.)



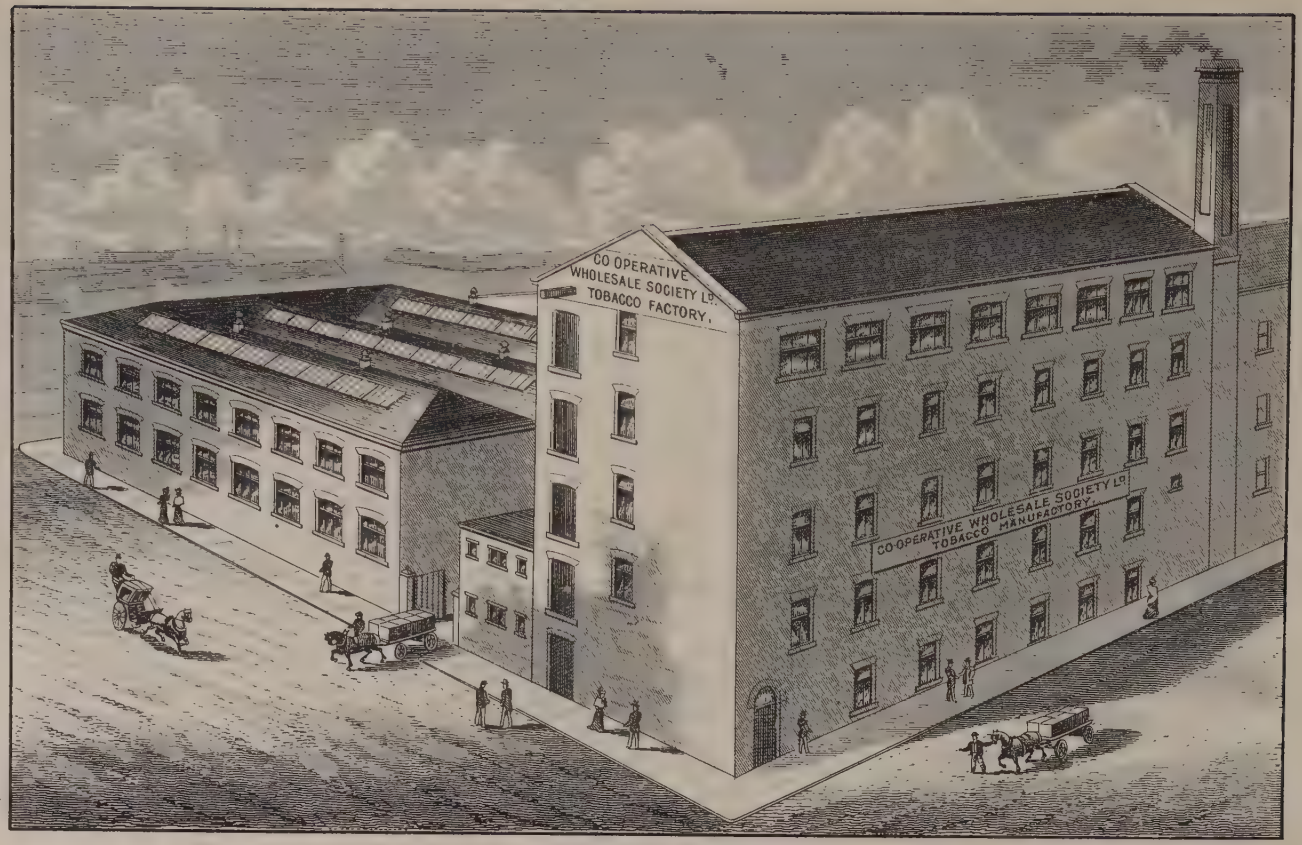
SHIRT AND MANTLE AND UNDERCLOTHING FACTORY, BROUGHTON, NEAR MANCHESTER,

(See page 22.)



CLOTHING FACTORY, BROUGHTON, NEAR MANCHESTER

(See pages 23 and 79.)



TOBACCO FACTORY, MANCHESTER.

(See pages 24 and 81.)

FLOUR MILL, SILVERTOWN, LONDON.

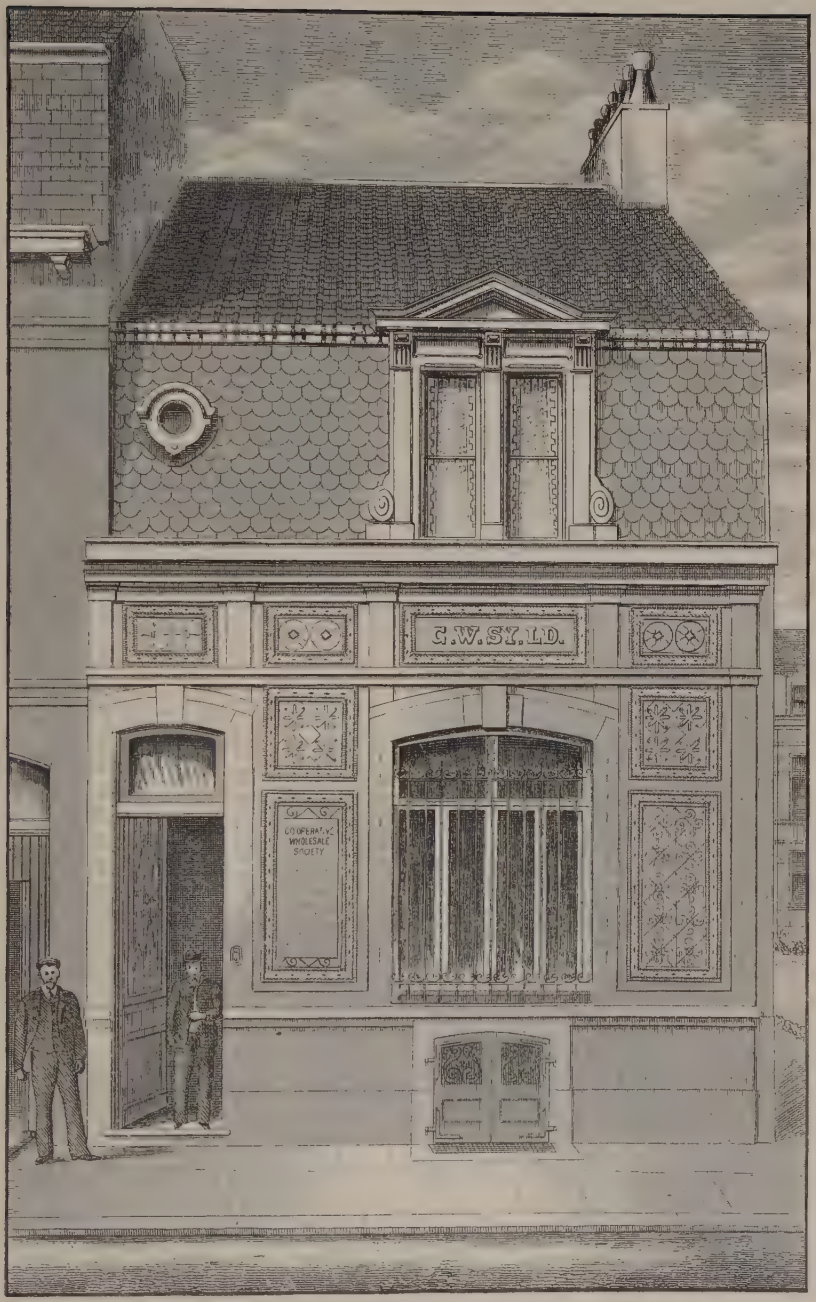
(See page 13.)

LONGTON CROCKERY DEPOT.

(See pages 10 and 82.)

LONGTON CROCKERY DEPOT—SHOWROOM.

(See pages 10 and 82.)

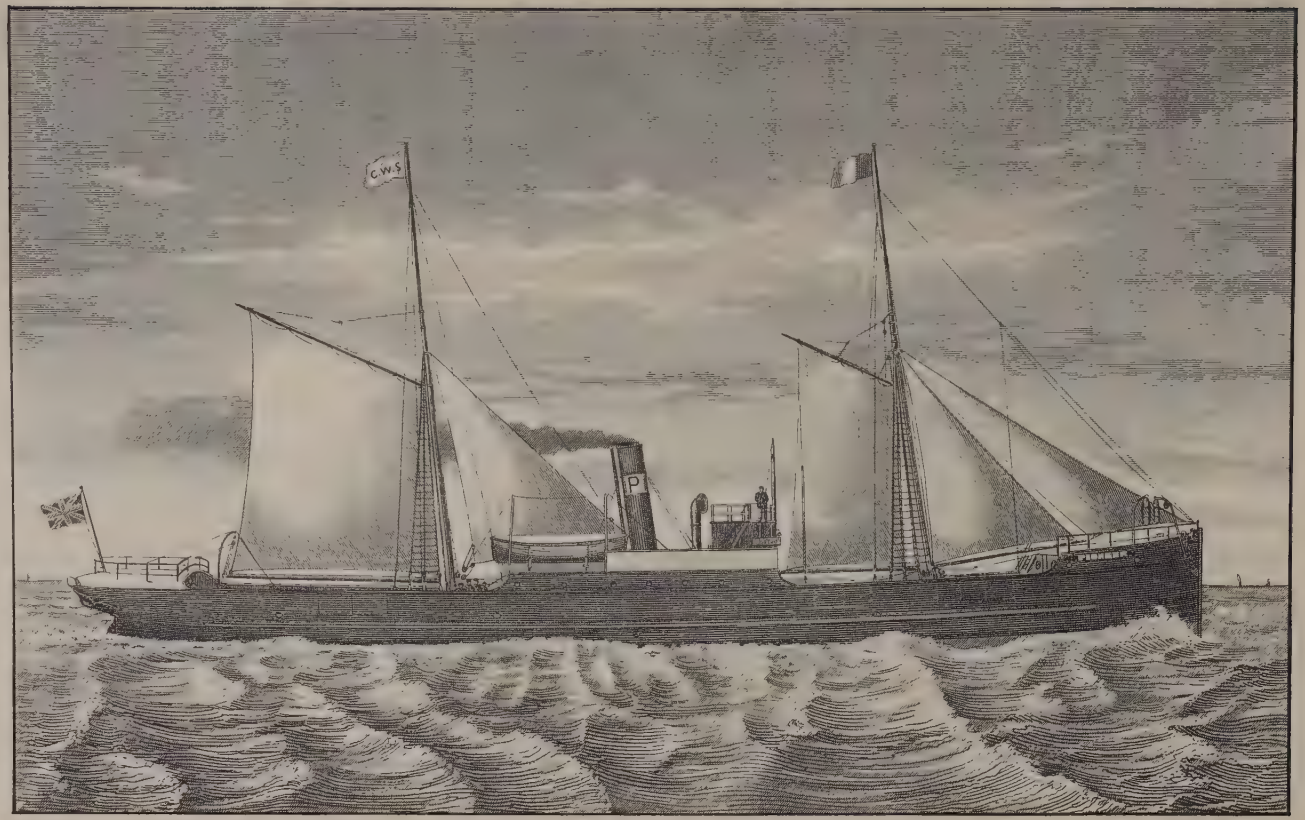


CALAIS OFFICES.

S.S. "LIBERTY," GOOLE-HAMBURG LINE.

S.S. "EQUITY," GOOLE-HAMBURG LINE.

S.S. "FEDERATION," Goole-Hamburg Line.



S.S. "PIONEER," Manchester and Rouen Line.

S S. "PROGRESS," Goole-Calais Line.

THE

Co-operative Wholesale Society

LIMITED.

Enrolled August 11th, 1863, under the Provisions of the Industrial and Provident Societies Act, 25 and 26 Vict., cap. 87, sec. 15, 1862.

BUSINESS COMMENCED MARCH 14TH, 1864.

SHARES, £5 EACH, TRANSFERABLE.

Central Offices, Bank, Grocery and Provision, and Boot and Shoe Warehouses:

BALLOON STREET, MANCHESTER.

Drapery Warehouses:

DANTZIC STREET, MANCHESTER.

Woollen Cloth and Ready-mades Warehouse:

CORPORATION ST., MANCHESTER.

Furnishing Warehouse:

HOLGATE STREET, MANCHESTER.

Branches:

WATERLOO STREET, NEWCASTLE-ON-TYNE,

AND

LEMAN STREET, LONDON, E.

Depots and Salerooms:

LEEDS, HUDDERSFIELD, NOTTINGHAM, BLACKBURN, AND BIRMINGHAM.

Purchasing and Forwarding Depots.

England:

LIVERPOOL, BRISTOL, LONGTON, GOOLE, GARSTON, CARDIFF, AND NORTHAMPTON.

Ireland:

CORK, LIMERICK, TRALEE, AND ARMAGH.

America: NEW YORK.
Canada: MONTREAL.
France: CALAIS AND ROUEN.
Australia: SYDNEY.
Denmark: COPENHAGAN, AARHUS, ODENSE.
Germany: HAMBURG.
Sweden: GOTHENBURG.
Spain: DENIA.

Irish Creameries:

ABINGTON.
ANNACARTY.
AUGHADOWN.
BALLINLOUGH.
BALLYBRICKEN.
BALLYDWYER.
BALLYFINANE.
BILBOA.
BOHERBUE.
BUNKAY BRIDGE.
CASTLEMAHON.
COACHFORD.
CUTTEEN.
DEVON ROAD.
DICKSGROVE.
DINGLE.
DROMCLOUGH.
DUNGRUD.
EFFIN.
FEALE BRIDGE.
GLENMORE.
GREENANE.
GREYBRIDGE.
HOLLYFORD.
KILCOMMON.
KILMIHILL.
LIXNAW.
MORNING STAR (GORMANSTOWN).
MOUNT COLLINS.
OOLA.
RATHMORE.
SMERLA BRIDGE.
STRADBALLY.
TARMON.
TRALEE.

With numerous Auxiliaries.

Productive Works.

Biscuits and Sweets Works:
CRUMPSALL, NEAR MANCHESTER.

Boot and Shoe Works:
LEICESTER & HECKMONDWIKE.

Soap and Candle Works:
IRLAM.

Woollen Cloth Works:
LIVINGSTONE MILL, BATLEY.

Ready-Mades Works:
HOLBECK, LEEDS, AND
BROUGHTON, MANCHESTER.

Cocoa and Chocolate Works:
116, LEMAN STREET, LONDON.

Corn Mills:
DUNSTON-ON-TYNE.
SILVERTOWN, LONDON.

Furniture Factory:
BROUGHTON, MANCHESTER.

Printing Works:
LONGSIGHT, MANCHESTER.

Preserve and Pickle Works:
MIDDLETON JUNCTION.

Shirts, Mantles, Underclothing, and Corsets:
BROUGHTON, MANCHESTER.

Lard Refinery:
WEST HARTLEPOOL.

Tobacco Factory:
SHARP STREET, MANCHESTER.

Flannel Factory:
HARE HILL MILLS, LITTLEBORO'.

Shipowners and Shippers

BETWEEN

GARSTON AND ROUEN; GOOLE AND CALAIS; GOOLE AND HAMBURG; MANCHESTER AND ROUEN.

Steamships Owned by the Society:

"LIBERTY." "EQUITY." "FEDERATION." "PIONEER."
"PROGRESS." "DINAH." "BRITON."

Banking Agencies:

THE MANCHESTER AND COUNTY BANK LIMITED.
THE LONDON AND COUNTY BANK LIMITED.
THE NATIONAL PROVINCIAL BANK OF ENGLAND LIMITED.
THE MANCHESTER AND LIVERPOOL DISTRICT BANK LIMITED.
THE LANCASHIRE AND YORKSHIRE BANK LIMITED.
THE UNION BANK OF MANCHESTER LIMITED.
THE LONDON AND MIDLAND BANK LIMITED.

General Committee.

Chairman:	Vice-Chairman:
Mr. JOHN SHILLITO,	Mr. THOMAS BLAND,
17, Cavendish Terrace, Halifax.	Rashcliffe, Huddersfield.

Mr. WILLIAM BATES .....Green Lane, Patricroft.
Mr. JAMES FAIRCLOUGH .....33, Sackville Street, Barnsley.
Mr. E. GRINDROD .....13, Holker Street, Keighley.
Mr. THOMAS HIND.....53, St. Peter's Road, Leicester.
Mr. R. HOLT .....84, Tweedale Street, Rochdale.
Mr. THOMAS KILLON .....45, Heywood Street, Bury.
Mr. WILLIAM LANDER .....155, Escrick Street, Halliwell, Bolton.
Mr. JOHN LORD .....19, Tremellen Street, Accrington.
Mr. T. E. MOORHOUSE.....*Reporter* Office, Delph.
Mr. ALFRED NORTH.....Mount Pleasant, Batley.
Mr. H. C. PINGSTONE.....Yew Bank, Brook Road, Heaton Chapel.
Mr. A. SCOTTON .....Avondale House, New Normanton, Derby.
Mr. G. THORPE .....14, Thornfield, Saville Town, Dewsbury.
Mr. D. McINNES .....63, Portland Street, Lincoln.

Newcastle Branch Committee.

CHAIRMAN: Mr. T. TWEDDELL, Hutton Avenue, West Hartlepool.

VICE-CHAIRMAN: Mr. THOS. SHOTTON, Summerhill, Shotley Bridge, Durham.

SECRETARY: Mr. ROBERT GIBSON, 120, Sidney Grove, Newcastle-on-Tyne.

Mr. GEORGE BINNEY .....73, Atherton Street East, Durham.
Mr. W. D. GRAHAM.....123, Bedeburn Road, Jarrow-on-Tyne.
Mr. ROBERT IRVING.....Woodrouffe Terrace, Carlisle.
Mr. THOMAS RULE.....20, Ravensworth Terrace, Bensham, Gateshead.
Mr. WILLIAM STOKER .....Seaton Delaval, Newcastle-on-Tyne.

London Branch Committee.

CHAIRMAN: Mr. GEO. HAWKINS, 53, Kingston Road, Oxford.

VICE-CHAIRMAN: Mr. GEO. SUTHERLAND, 41, Taylor Street, Woolwich, S.E.

SECRETARY: Mr. HENRY PUMPHREY, Paddock Terrace, Lewes.

Mr. JOSEPH CLAY .....Stratton Road, Gloucester.
Mr. H. ELSEY .....Bickleigh, Festing Grove, Festing Road, Southsea.
Mr. J. F. GOODEY .....New Town Lodge, Colchester.
Mr. GEORGE HINES .....North Bank, Belstead Road, Ipswich.
Mr. R. H. TUTT .....134, Braybrook Road, Hastings.

Scrutineers:

Mr. F. HARDERN, Oldham. | Mr. J. J. BARSTOW, Dewsbury.

Auditors:

Mr. THOS. J. BAYLIS, Masborough. | Mr. JAMES E. LORD, Rochdale.
Mr. THOMAS WOOD, Manchester. | Mr. ISAAC HAIGH, Barnsley.

Officers of the Society.

Secretary and Accountant:	Bank Manager and Cashier:
Mr. THOMAS BRODRICK.	Mr. JOHN HOLDEN.

Buyers, Salesmen, &c.

Manchester—Grocery and Provisions:

Mr. THOMAS PEARSON.	Mr. A. W. LOBB.
Mr. JAS. MASTIN.	Mr. WILLIAM WROOT.

Mr. H. WIGGINS.

Manchester—Drapery:

Mr. J. MEADOWCROFT.	Mr. JOHN SHARROCKS.
Mr. WILLIAM T. ALLITT.	Mr. JOHN T. OGDEN.

Manchester—Woollens, Boots, and Furniture:

Woollens and Ready-mades .....Mr. W. GIBSON.
Boots and Shoes .....Mr. HENRY JACKSON.
Furniture .....Mr. T. R. ALLEN.

Shipping Department:

General Manager .....Mr. CHAS. R. CAMERON.

Shipping and Forwarding Depots:

Rouen (France) .....Mr. JAMES MARQUIS.
Goole .....Mr. W. J. SCHOFIELD.
Calais .....Mr. WILLIAM HURT.

London:

Tea, Coffee, and Cocoa .....Mr. CHARLES FIELDING.

Liverpool:

Grocery and Provisions .....Mr. J. T. HOLBROOK.

Salerooms:

Leeds .....Mr. JOSEPH HOLDEN.
Nottingham .....Mr. A. DELVES.
Huddersfield .....Mr. J. O'BRIEN.
Birmingham .....Mr. W. AMOS.
Northampton .....Mr. A. BAKER.
Cardiff .....Mr. JAS. F. JAMES.
Blackburn .....Mr. H. SHELMERDINE.

Longton:

Crockery Depôt .....Mr. J. RHODES.

Newcastle:

Grocery and Provisions .....Mr. ROBT. WILKINSON.
" " .....Mr. T. WEATHERSON.
Drugs, Drysaltery, &c. .....Mr. R. A. WALLIS.
Paper, Twine, &c. .....Mr. H. GLENNY.
Drapery .....Mr. JOHN MACKENZIE.
Boots and Shoes .....Mr. O. JACKSON.
Furniture and Hardware .....Mr. J. W. TAYLOR.
Chief Clerk .....Mr. H. R. BAILEY.

Buyers, Salesmen, &c.

London:

Grocery and Provisions.....Mr. BENJAMIN JONES.
" " " .....Mr. WM. OPENSHAW.
Drapery.....Mr. F. G. WADDINGTON.
Woollens and Ready-mades.....Mr. GEORGE HAY.
Boots and Shoes .....Mr. ALFRED PARTRIDGE.
Furnishing .....Mr. F. LING.
Chief Clerk .....Mr. WILLIAM STRAWN.

Bristol Depot:
Mr. J. W. JUSTHAM.

Irish Branches—Butter and Eggs.

Cork:
Mr. JAMES TURNBULL.

Limerick:
Mr. WILLIAM L. STOKES.

Tralee:
Mr. JAMES DAWSON.

Armagh:
Mr. J. HOLLAND.

Colonial and Foreign Depots:

New York (America):
Mr. JOHN GLEDHILL.

Montreal (Canada):
Mr. A. C. WIELAND.

Copenhagen (Denmark):
Mr. J. HALPIN.

Hamburg (Germany):
Mr. WM. DILWORTH.

Aarhus (Denmark):
Mr. H. J. W. MADSEN.

Gothenburg (Sweden):
Mr. H. C. K. PETERSEN.

Sydney (Australia):
Mr. R. J. FAIRBAIRN.

Productive Works, &c.:

Lower Crumpsall Biscuit, &c., Works:
Mr. GEORGE BRILL.

Broughton (Manchester) Cabinet Factory:
Mr. J. HOLDING.

Leicester Boot and Shoe Works:
Mr. JOHN BUTCHER.

Irlam Soap Works:
Mr. J. E. GREEN.

Heckmondwike Boot and Shoe Works:
Mr. J. YORKE.

Leeds Ready-Mades Works:
Mr. WILLIAM UTTLEY.

Broughton Clothing Factory:
Mr. A. GRIERSON.

Batley Woollen Cloth Works:
Mr. S. BOOTHROYD.

Dunston Corn Mill:
Mr. TOM PARKINSON.

West Hartlepool Lard Factory:
Mr. W. HOLLAND.

Middleton Junction Preserve Works:
Mr. A. J. CLEMENTS.

Flannel Factory:
Mr. W. H. GREENWOOD.

Printing Department:
Mr. G. BREARLEY.

Tobacco Factory:
Mr. J. C. CRAGG.

Building Department:
Mr. P. HEYHURST.

Architect:
Mr. F. E. L. HARRIS.

Employés.

NUMBER OF EMPLOYÉS, SEPTEMBER, 1899.

Distributive Departments.			Collective Totals.
General, Drapery, Boot and Shoe, and Furnishing Offices..	Manchester	370	
Cashier's Office	„	25	
Grocery Department	„	209	
Stationery „	„	6	
Drapery „	„	124	
Woollen Cloth Department	„	29	
Boot and Shoe „	„	38	
Furnishing „	„	71	
Shipping „	„	8	
Building „	„	170	
Dining-room „	„	11	
Other „	„	38	
			1,099
Branches.			
Newcastle		456	
„ Productive Department		284	
„ Building „		121	
			861
London (Office and Departments)		337	
„ Bacon, Bakery, Packing, and Pickling		70	
„ Tailoring		70	
„ Brush, Bedding, and Upholstery and Polishing		51	
„ Building		165	
„ Tea		348	
„ Coffee and Cocoa		93	
„ Stables		26	
			1,160
Depôts.			
Bristol		72	
Cardiff		11	
Northampton		14	
			97
Purchasing Depôts.			
Liverpool Branch—Grocery and Shipping		35	
Longton Crockery		36	
Irish Branches		79	
„ Creameries		305	
			455
Foreign Purchasing Depôts.			
New York		6	
Montreal		3	
Copenhagen		16	
Hamburg		5	
Aarhus		9	
Gothenburg		10	
Odense		5	
Denia		2	
Sydney		4	
			60
Carried forward			3,732

NUMBER OF EMPLOYÉS, SEPTEMBER, 1899.

		Collective Totals.
Brought forward		3,732
Salerooms.		
Leeds	4	
Nottingham	2	
Birmingham	1	
Huddersfield	1	
		8
Shipping Offices.		
Goole	17	
Garston	1	
Rouen	6	
Calais	9	
		33
Steamships.		
"Pioneer"	14	
"Progress"	13	
"Federation"	18	
"Equity"	19	
"Liberty"	19	
"Briton"	4	
"Dinah"	4	
		91
Productive Works.		
Crumpsall Biscuit Works	375	
Middleton Junction Preserve Works	302	
Leicester Shoe Works, Knighton Fields	1,903	
„ „ Duns Lane	514	
Enderby	102	
Heckmondwike Shoe Works	360	
„ Currying Department	50	
Irlam Soap Works	300	
Batley Woollen Mill	155	
Leeds Ready-Mades	474	
Dunston Corn Mill	172	
West Hartlepool Lard Refinery	35	
Broughton Cabinet Factory	118	
„ Tailoring „	398	
„ Shirt „	96	
„ Mantle „	51	
„ Underclothing Factory	51	
„ Broughton Corsets	57	
Manchester Printing Department	350	
„ Tobacco Factory	238	
Littleborough Flannel Factory	75	
		6,176
Roden Estate		30
Total		10,070

The Co-operative Wholesale Society Limited.

ALTHOUGH the Wholesale Society has been in existence over thirty-six years, there still remains considerable ignorance of its origin, aims, and methods, even amongst those who should be first in the possession of this knowledge. It is with the object of providing such information that this article is inserted, in order that the extent of the Wholesale's work may be better understood.

Even during a century unequalled for advance of knowledge and scientific discovery, the establishment of the Wholesale and its rapid growth constitute an achievement unique in the annals of working-class enterprise.

Commencing in 1863 in an obscure office in Manchester, it has developed with such an astonishing vigour that it is true of the activities of the Wholesale that on them the sun never sets.

It will not be deemed out of place if we remind our readers of the relation which unites the interest of the individual Co-operator with that of the Wholesale Society, and the statement may also serve to remove the misconceptions frequently met with as to the constitution and ownership of this gigantic business.

The member of a retail society has at least no difficulty in defining his position with regard to the store. He, in association with others, has subscribed capital, in the form of shares and loans, with which the business is carried on. The profits, after meeting the necessary trade expenses, are then divided according to the amount spent during the quarter or half year.

The federation of societies forming the Co-operative Wholesale Society is simply an extension of this same principle. These societies take up shares in proportion to the number of their members, and with these, added to the amounts invested as loans, the C.W.S. performs the wholesale function, in the same way as the retail societies provide for their members. The profits in like manner revert to those who create them. There are no private shareholders, the rules prohibit the admission of any but *bonâ-fide* registered Co-operative Societies. The constitution of the Wholesale is thoroughly democratic. The Committee are elected by the shareholding societies, and any member of such a society is eligible

as a candidate. The questions concerning the business are dealt with at the quarterly meetings, which are attended by delegates sent in proportion to the number of members in the respective societies.

It is hoped that this brief recapitulation will tend to a clearer understanding of the dependence of the C.W.S. on the loyalty of individual Co-operators, and stimulate their support of an institution peculiarly and absolutely their own.

In 1869 the C.W.S. took possession of the warehouse in Balloon Street, destined to become its permanent centre.

The premises at that time were of modest extent, covering about 230 square yards. At the time when the removal was contemplated some of the timid spirits doubted the wisdom of taking so spacious a building, but thought the portion not needed could be let to advantage. These misgivings, however, speedily proved groundless, for extensions and alterations have been constantly in hand from the very commencement of business.

The sales for this year, 1869, were £507,217, and have increased by leaps and bounds until in 1898 the enormous total of over £12,500,000 was reached.

By 1871 the trade in the Newcastle district had grown to such an extent that the Committee felt justified in establishing a branch in Newcastle, and subsequent events have proved the wisdom of the step.

The London Branch was opened in 1874, and has developed in many directions.

Further information respecting the Newcastle and London Branches will be found on other pages.

Although the space covered by the warehouses is so great, only a fraction of the goods sold passes through them, as in the cases of large consignments the goods are sent from the works, or, in the case of imports, from the port of landing. The Society has purchasing and forwarding depôts at Liverpool, Bristol, Goole, Garston, Cardiff, and Northampton.

A depôt was opened in 1886 at Longton, in Staffordshire, for the selection and purchase of earthenware suitable for the C.W.S. trade, and several enlargements have been made to accommodate the business.

In order to meet the convenience of widely scattered societies—those which lay wide apart from the various business centres—depôts and salerooms have been established at Leeds, Blackburn, Nottingham, Huddersfield, and Birmingham.

The growth of the Wholesale's trade in Continental produce led to the Society embarking in the shipping trade. A small vessel was purchased in 1876, which sailed between Goole and Calais,

taking out coal and English manufactures, and bringing back French produce. In 1879 the steamship "Pioneer" was built for the purpose of running between Garston (Liverpool) and Rouen, and in a few years afterwards the Goole and Hamburg service of steamers was established. The Society now owns a fleet of seven steamers, which bear the following names: "Pioneer," "Progress," "Equity," "Federation," "Liberty," "Dinah," and "Briton." Their total cost has exceeded £78,000, but, like other properties of the Society, they have been liberally depreciated, and now stand as nil in the books of the Society—their total cost having been entirely written off by depreciation.

Buyers are located at Copenhagen, Odense, Gothenburg, Aarhus, and Hamburg, who purchase and superintend the despatch of the enormous shipments of butter and other produce sold to societies. The annual shipments of butter alone by the C.W.S. from these ports exceed £1,900,000.

There are also buyers at New York, Montreal, Sydney, and Denia (Spain).

DRAPERY DEPARTMENT.

The trade in this department in 1875 was £71,290, and included the Woollens and Ready-mades Department. The sales during 1898 were £481,136 for drapery, and for woollens, &c., £114,121.

The block of buildings has been entirely reconstructed and enlarged, but in 1897 the Woollens and Ready-mades had to be accommodated with an entire warehouse situated in Corporation Street.

The vagaries of fashion are under constant survey by the buyers, and in every room, from floor to ceiling, are stocked all the variety of goods that are destined to render shopping at the stores such an attractive occupation.

As the seasons follow in quick succession, the coming of each is preceded by special displays of materials of utility and ornament in which our sisters, cousins, and aunts may be arrayed.

Here also may be seen the productions of the C.W.S. Shirt, Underclothing, Corset, and Mantle Factories, to which further reference will be made later.

NEWCASTLE-ON-TYNE BRANCH.

This branch, which commenced operations in a small way in the year 1872, has increased in its business and developed to such an extent that the sales for the year ending December, 1898, amounted to no less than £2,847,482. Commencing its business in Pudding Chare, Newcastle, new blocks of buildings have, from time to time, been erected in Thornton and Waterloo Streets, wherein the Grocery and Provision, Drapery, Furnishing, and

Boot and Shoe Departments have been carried on, and, to cope successfully with the ever-increasing trade, a handsome block of warehouses has recently been erected in West Blandford Street, the branch in all its departments employing over 680 hands.

Land has been acquired on the Newcastle Quay on which to build a large warehouse, and in addition the Society has recently secured nearly four acres of land at Pelaw (some five miles from Newcastle), where it is intended to remove some of the existing productive departments in order to make additional room for the various distributive departments, which, notwithstanding the large spaces already at their disposal, are so much hampered in the carrying on of their respective trades. At Pelaw it is proposed to manufacture ready-made clothing and furniture, and to pack all kinds of drug and drysaltery goods. To these also it is contemplated to add other productions, and the buildings of both of the last-mentioned places are to be commenced at once.

THE LONDON BRANCH

was commenced in 1874, and has proved of great service in developing and encouraging the southern societies. Co-operation in the metropolis has not been a plant of robust growth, and it has called forth the most assiduous attention of those who have endeavoured to plant it in a soil somewhat uncongenial.

At first only a modest trade was done, the sales in 1876 amounting to £130,752, but in 1884 they had increased to £424,794. The premises originally occupied had to be extended, and in 1885 the Society commenced the present building.

The structure is not only of a handsome character, but it is furnished with every means for dealing with the ever-increasing business promptly and efficiently, the total covering 18,000ft.

The opening of this new building in 1887 apparently gave an additional and vigorous impetus to the work of the C.W.S. in the South, for in 1891 the trade of the branch reached over a million and a quarter for the year. Since then steady progress has been maintained, and in 1898 the sales realised £2,000,000.

The London Branch stands in a thickly-populated neighbourhood. It forms a striking contrast to the mean and squalid surroundings, and stands a prominent and beautiful illustration of the beneficent influence exerted by Co-operation in a city dominated by competition.

The main buildings are surrounded by several others belonging to the Wholesale, which are devoted to various forms of production and other purposes needed for the London Branch. The Bacon-smoking Department is in a large building almost opposite the main one, and here some 2,000 sides of bacon, with hams and

other articles, are regularly turned out each week. There is also a large department devoted to the production and packing of various specialities, in which some eighty of the staff find employment. At the Brush Works, in another building, all kinds of brooms and brushes are made, from the best hair to the common scrub, the greater part of the material being imported direct. In the Bedding Works all kinds of bedding are produced, including hair, flock, and feather beds and pillows, palliasses and cushions, whilst in the Upholstery Department an increasing business is being done, suites being covered in silk, plush, velvet, and various other materials. There is also a French Polishing Department attached to this portion of the business, where the greater portion of the furniture dealt in by the London Branch is finished. Within a few minutes' walk of Leman Street, situated in Wellclose Square, is a Tailoring Factory, where about seventy employés find regular employment in splendid workrooms, the goods being produced under the best possible conditions, and under, we believe, the best scale of payment in London.

The labours of the C.W.S. here have not been limited strictly to wholesale distribution. The difficulties attending propaganda work amongst the Londoners are recognised to be great, and special efforts have been made to establish societies in the city by advice and pecuniary assistance rendered under such conditions as will not undermine the independence of the people whom it is sought to benefit.

A depôt was commenced at Bristol in 1884 for the convenience of societies in that locality, and since its establishment it has rendered valuable service in founding and promoting the interests of many retail societies.

There is also a depôt in Cardiff, which is doing most useful work amongst the societies in South Wales; also one in Northampton, which is very much appreciated by the societies in that district. Each one of these three depôts is found to be too small for the work it has to do, and arrangements are rapidly being completed for extensions.

SILVERTOWN MILL, LONDON.

Silvertown, the district in which the second flour mill of the C.W.S. is now in course of erection, is situated a few miles below London, on the north bank of the Thames, nearly opposite the town of Woolwich.

The site purchased for this and other purposes adjoins the Great Eastern Railway, from which sidings are brought right up to the mill. It has a frontage to the river of 330 feet, throughout the entire length of which vessels can be safely berthed.

The building is designed to receive a plant capable of producing 24 sacks of flour per hour nominal, and the machinery will be of the very latest type, every advantage having been taken of all recent improvements likely to increase the efficiency of the mill or economy in its working.

THE TEA DEPARTMENT.

During the earlier years of the Wholesale the tea trade was in the hands of a representative in London, but in 1882 it was considered that circumstances would justify the establishment of a Tea Department, and the Scottish Wholesale Society was invited to join in the enterprise. After due consideration the two Societies commenced their joint venture in a warehouse in Rupert Street. The staff comprised four warehousemen and six boys. A reputation was at once established for Co-operative teas, and during the last two months of 1882 the sales showed an increase of £10,049 above those of the corresponding period of 1881. This success continued year after year; more space was acquired, and yet still more demanded, until after many vicissitudes the department found a home in the magnificent warehouse situated opposite the London Branch.

This was opened in March, 1897, and is admirably suited to its purpose. The basement not only lies below the whole area of the ground floor, but it also undermines the streets at the front and side no inconsiderable distance.

An interesting feature in this model tea warehouse is the application of the electric motor, of which there are five in number, driving four blending machines of various dimensions, taking from 800lbs. to 2 tons of tea at one operation.

Another feature is the adaptation of very ingenious weighing and packing machines, also driven by electricity, which do away with any necessity of the tea being touched by hand, weighing each packet to a leaf.

The salerooms are fitted up with mahogany counters, used for setting out samples of every lot of tea in the daily public auctions, that they may be examined and tasted, and also for making and testing blends, of which there are close upon 1,000, suited to every particular water, and still more particular palate in the United Kingdom. Underneath these counters are drawers containing upwards of 13,000 small tin boxes, used for keeping records of every blend made up, and also for the reception of samples of each parcel of tea purchased or lot imported into the country and put up for public auction, the latter sometimes numbering from 800 to 1,000 in one day.

Other rooms are devoted to roasting and testing samples of coffee and cocoa.

The total value of supplies from this department during 1898 was £753,132, including tea, coffee, and cocoa, the weight being 10,176,899lbs. tea, 1,625,344lbs. coffee, and 600,544lbs. cocoa.

COCOA AND CHOCOLATE WORKS.

Of late years cocoa has shared with soap the position of the most extensively boomed articles of domestic use. One cannot escape from the announcements of the virtues of one or another maker's cocoa. In addition to the usual displayed advertisement, the unwary reader is beguiled into perusing paragraphs with innocent or startling headlines, only to find that the remedy for life's ills is Somebody's cocoa. Not content to supply the public with a beverage pure and simple, ingenuity combines ingredients of wondrous virtue, which, according to the maker's account, form a veritable elixir of life, but which is solemnly denounced by the rival makers as an injurious and objectionable mixture.

There can be little doubt that, say, nine or ten of the leading makers spend probably £200,000 per annum in advertising; and this charge ultimately falls on the consumers, amongst whom are Co-operators, who, owning a cocoa factory of their own, are content to help in paying this amount away for practically nothing, instead of supporting their own works and securing the profits themselves.

The C.W.S. started the manufacture of cocoa in 1887, and has succeeded in turning out a really excellent article. The concentrated extract and the cocoa essence, especially, are to the unprejudiced palate not beaten anywhere; in proof of this the sales are increasing so rapidly that plans are now being prepared for a model factory, which will be capable of keeping pace with the enhanced trade.

The value of supplies during 1898 was £24,400, an amount that would soon be increased tenfold if those whose capital provides the means for maintaining the factory realised how their interests are involved in its prosperity.

THE IRISH BRANCHES.

The Wholesale Society, although it only commenced business in 1864, had by 1866 already established a depôt in Ireland, at Tipperary, for the direct purchase of Irish produce. Here we have a typical instance of the Society's recognised policy—expressed in its earliest days—not only to eliminate the middleman but to go direct to the producer, and so protect the constituent societies the more fully against adulteration and fraud.

The policy of direct purchasing depôts proved so successful that other depôts were very soon established in the different districts—Limerick, in 1869; Armagh, in 1873; Tralee, in 1874; and Cork, in 1876.

Over 80,000cwts. of Irish butter were bought in 1898, and the sales amounted to £389,262, out of the two and a half millions, the total amount of the C.W.S. butter sales.

Factories on the French system have been established at Armagh and Tralee. The Wholesale has now 35 creameries working, with 28 auxiliaries, chiefly in the south-western counties, and has been very successful in the attempt at butter-making. No expense was spared that the creameries might compete successfully with the well-equipped Danish creameries, with the result that the C.W.S. creamery butter has gained, in open competition, one gold, five silver, and four bronze medals, as well as other awards.

The output of the Wholesale's creameries for one quarter alone—September quarter, 1898—amounted to over £64,000, or nearly £5,000 a week. The total weight of creamery butter for the year was over 36,000cwts. This does not include purchases from other Co-operative creameries.

A large business is also done in eggs and bacon.

CRUMPSALL BISCUIT AND SWEETS WORKS.

The purchase of these works in 1873 marked an important stage in the history of the Co-operative Wholesale Society. Up to that time its function had been entirely distributive, but with the acquiring of Crumpsall Works a new departure was inaugurated.

The Committee of the Society, who were then, as now, ever on the alert to secure advantages for the retail stores, saw in these works an opening for the profitable employment of capital, and the results have fully justified their expectations.

Twenty years ago the works presented a much less imposing appearance than is seen to-day. In common with nearly all the undertakings of the Wholesale, rapid growth has attended these works, and, although several departments have been completely transferred to other localities, those which are carried on here have so increased that it has become necessary to build to almost double the extent.

Originally devoted to the manufacture of biscuits and sweets, it was not long before jam was also an article of Crumpsall production, but this branch attained such dimensions that in 1896 it was accommodated with a factory to itself at Middleton.

At present the principal goods made here are biscuits, cakes, and boiled and other kinds of sweets, drugs, and drysalteries.

The machinery used is of the most modern type, the ingredients of the purest and best obtainable, and it is not surprising to learn that these articles find an ever-increasing demand.

Then table jellies are also made here, and special attention has been devoted to obtain a really excellent and wholesome product.

Space forbids anything like enumeration of the sundries which are packed at Crumpsall, but almost every variety of grocery sundries is included.

MIDDLETON PRESERVE AND PICKLE WORKS.

This factory is situated at Middleton Junction, near Oldham, and lies about six miles from Manchester. The site is most convenient, having the railway at the back of the building, and a siding specially constructed for the works enables the waggons to be brought completely within cover of the building, thus facilitating both loading and discharging.

The main building is devoted to the manufacture and storage of jam. In the fresh fruit season the scene presented is one of great activity, and as many as 700 persons are employed. In the large building on the upper floor the fruit is received and carefully picked. During the busiest time as many as 350 women and girls are employed in examining the fruit, removing foreign substances, stalks, &c.

As an instance of the smartness of transit, it might be mentioned that strawberries growing in Kent at noon on one day are picked, packed, and carried to Middleton Works—250 miles distant—by five o'clock the next morning. During the last two years a quantity of fruit from the C.W.S. Estate at Roden, in Shropshire, has been made into jam, and as time goes on considerable developments are expected in this direction.

Here also candied peel is made, and the famous Middleton pickles are prepared.

Everyone who visits these works is struck by the space and cleanliness of the premises, and all Co-operators may rest assured that everything possible is done to provide them with wholesome and palatable articles of diet.

LEICESTER BOOT AND SHOE WORKS.

On the Knighton, or southern, side of Leicester, hard by the Midland main line to London, stands one of the grandest monuments of Co-operative enterprise. How it grew sounds almost like a romance. This Wheatsheaf Co-operative Boot and Shoe Works grew—it grew big, it grew powerful, and as it grew big and powerful it grew in beauty. Beauty is a "hard saying" in regard to a factory; it seems so impossible. But here, just where the town of Leicester

melts into its open, beautifully green pastures, stands the finest boot and shoe factory in the whole world. The outward appearance of the structure is imposing, and combined with its noble proportions there is a lightness, an airiness, and a brightness about the whole place that is almost unknown in ordinary factories. Here we have a grand combination of sweetness, light, and industry, and a wonderland of machinery, controlled by male and female operatives, who work in a pure atmosphere, with abundance of daylight and hundreds of shaded electric lamps.

A noticeable feature of this factory is the entire absence of dust; this is effected by an admirable arrangement by which the dust is drawn by a powerful draught through pipes connected with the various machines and deposited outside the building, thus adding greatly to the comfort of the employés.

The manufacture of boots and shoes was commenced in 1873, in Duns Lane. Within the next few years extensions had to be made several times as a matter of course, and finally the Committee decided upon erecting a new factory, and so the Wheatsheaf Works came into existence, being opened in 1891. The buildings cover an area of two acres, but the Society purchased altogether six acres, so there is ample space for further developments.

The total capacity of the whole of the works (Wheatsheaf Works, West End Shoe Works, Duns Lane, and Enderby) is 50,000 pairs per week. The present production being 35,000 pairs per week, it is obviously to the interest of all the members of retail stores that the works should be run to the maximum capacity and thus reduce the expenses.

IRLAM SOAP AND CANDLE WORKS.

The next productive venture of the C.W.S. was the manufacture of soap. The immense amount spent on advertising and presents in connection with the soap trade must convince the most dense individual that the profits of this business must be enormous. The C.W.S. Committee saw what possibilities were open to Co-operators in the shape of retaining these profits by manufacturing their own soap. Accordingly, Durham Works were opened in 1874. The value of supplies in 1876 was £9,264, and this gradually increased until, in 1894, the sum of £37,684 was reached. But the C.W.S. was not satisfied with this amount of trade, and, in accordance with their usual forward policy, acquired a site on the Manchester Ship Canal, and erected the Irlam Soap, Candle, and Glycerine Works. The average weight of soap despatched weekly is 150 tons.

The position of the works is one of great advantage, as, owing to the contiguity of the canal, vessels bringing raw produce from Australia, South America, or elsewhere are able to bring their

cargoes to the very doors of the works. This in itself constitutes a great economy in handling, transhipping, and expenses connected therewith.

In the laboratory of the works, chemists are constantly engaged in analysing the various products and seeing that the highest standard of efficiency is maintained, and it may be asserted with confidence that the Irlam products are equal to the most belauded articles advertised everywhere.

Co-operators should remember that all these works described in this article are *theirs*, and *their* support is absolutely necessary to ensure the success of these productive enterprises.

HECKMONDWIKE BOOT AND SHOE AND CURRYING WORKS.

These works were commenced in 1880 for the manufacture of the heavier classes of boots and shoes, such as miners' and navvies', for instance. Some of the boots made here are of such a weighty and solid nature that they have earned the title of "Ironclads." Delicate trifles of this kind will turn the scale at 5lbs. each. A considerable demand exists for these heavy goods in the mining districts of the north-east of England, for Co-operation has obtained a strong foothold amongst the stalwart workers of those localities.

In 1887 an important addition was made by including currying.

The general features of the operations carried on resemble those to be seen at Leicester, and the two factories combined are able to supply all ages, conditions, and ranks of men, women, and children with appropriate foot wear.

The purchasers of boots or shoes should always look for the "Wheatsheaf" trade mark, and thus assure themselves that the articles they buy are of genuine material, as in the C.W.S. Works no substitutes are used.

BATLEY WOOLLEN CLOTH WORKS.

By including the manufacture of boots and clothing with those of food and soap, the Wholesale Society affords its members an opportunity of displaying an outward and visible sign of their adherence to Co-operative production.

The Livingstone Mill commenced work about 1871 as the Batley Manufacturing Company Limited. The prospectus stated that the directors were foremen, overlookers, and others practically acquainted with woollen manufactures. Working men were specially invited to become shareholders.

Twelve years afterwards the lack of success brought liquidation, and in 1886 the Wholesale Society decided to acquire the property and work the factory in the interests of its members.

Up to December, 1898, goods had been supplied to the amount of £233,935, as against £11,590 in 1888. As may be imagined, this great increase in business has meant a corresponding enlargement of the premises.

A designer is specially employed at Batley in order that original designs of novelty and taste may be prepared for Co-operators' wear, and the increasing demand indicates that these cloths are appreciated.

There is still room, however, for considerable improvement in the demand, and it might be effected if store members, when obtaining a fresh "rig-out," would take steps to ascertain whether the cloth is of Batley make.

LEEDS CLOTHING FACTORY.

This factory, though by no means very imposing from the outside, produces a very agreeable surprise to the visitor when once he gets inside the gates. The front of the building overlooks Holbeck Moor, a common once used as a racecourse, but now used by the inhabitants of South-West Leeds as a recreation ground. It is not too much to say that the Leeds Clothing Department has been one of the most successful of the C.W.S. undertakings. Since its commencement at Batley, in 1888, it has steadily increased in the number of hands employed, and the amount of trade done in making and trimming for the year 1898 amounts to £33,201. The present building is the third which has been occupied by this department, the first, as we have stated, being at Batley (Livingstone Mill); but, this being found too limited for the ever-increasing trade of this branch of the Wholesale Productive Works, the department was removed in 1890 to more commodious premises, situated in Harper Place, Leeds; and eventually, this also proving inadequate, the "Mint" Factory was purchased by the Wholesale in 1894, and the scene of operations was removed from Harper Place to the present site. Considerable extensions are at present in progress to meet the requirements of the growing trade.

Here again one is confronted with extraordinary evidence of the expedition secured by machinery in the cutting out of the cloth. From twenty to thirty layers of cloth are cut at one time by a steel knife, passing over wheels placed above and below the table; in fact, almost every operation, even the making of button-holes, is performed by some ingenious mechanism.

It should be a cause of legitimate self-congratulation to the wearers of C.W.S. clothes that no "white slaves" have been toiling in misery, amid unhealthy surroundings, to make these garments.

The arrangements of the light, the spacious apartments, and the bright and cheerful appearance of the workers give an added weight to the claim the C.W.S. makes for generous and consistent trade on the ground of the humane and reasonable treatment of the employés.

DUNSTON FLOUR MILLS.

The first step in the direction of corn milling by the Wholesale Society was taken in 1883, when a resolution was passed that "It is desirable to commence a flour mill in the Newcastle District." The question was not finally settled till 1886, when the Committee's recommendation was passed. A site admirable in every respect, containing 4,490 square yards, was purchased at Dunston, on the bank of the Tyne, and building operations commenced.

The millers of the North took alarm at these unmistakable signs of activity on the part of the Co-operators, and the report of a ring being formed to oppose the venture caused the Wholesale to urge the work forward, with the result that the projected ring was abandoned. The mill was opened in 1891, and up to December, 1898, the supplies had reached the value of £3,116,886.

About 8,000 sacks of flour are sent out weekly, and for the year ending December, 1898, no less a quantity than 338,980 sacks were sent out from these mills, the quality of the flour produced giving universal satisfaction.

Immediately facing the mill on the opposite side of the river are the enormous Elswick Ordnance Works, extending about a mile and three-quarters along the river front.

As the din of hammers falls upon the ear, one cannot refrain from contrasting the two opposing factories—in the one death-dealing weapons wrought by men for the destruction of their fellows; in the other is produced an essential of existence to sustain life, and, in addition, embodies a principle that is slowly but surely permeating the minds of men, that unity, not division, is the only path to the goal of happiness and content. When this is realised human industry will no longer be engaged in making cannon and shot, but will find employment in such peaceful and useful works as the C.W.S. controls for the benefit of Co-operators.

BROUGHTON CABINET WORKS.

Broughton is quite a little hive of Co-operative industry. Tailoring, furniture, shirts, mantles, corsets, and underclothing are all made here, and there is quite a colony of employés, numbering nearly 1,000.

The Cabinet Works was the first established. It was opened in 1893, and was intended for the manufacture of better-class

furniture. But the call for high-class furniture was not as good as was anticipated, and so cheaper work has had to be undertaken. This brings the factory more in competition with the little sweating shops in back streets and alleys, so that it has not had the same opportunity to make profits as the other productive departments of the Wholesale. It redounds, therefore, to the credit of the Broughton Factory and of the Wholesale that, notwithstanding all these adverse circumstances, they have stuck manfully to their guns. Fair wages are paid to the workers without regard to those workshops where the conditions of labour are far different.

If only Co-operators were aware of what the Broughton Cabinet Works, with its splendid equipment of up-to-date machinery, could do for them, the position of the works would, doubtless, be considerably improved.

A successful feature of the Cabinet Works is the Showcase and Shop Fittings Department. Among the stores recently fitted up from Broughton we may mention Earlestown, Colne, Huncote, Wednesbury, and Soho Societies. The new offices of the Rochdale Pioneers' Society, the London Boardroom, the Tea, Coffee, and Cocoa Department, Leman Street, and the Newcastle Branch Boardroom and Offices are standing testimony to the excellence of the work turned out by the Wholesale Society.

BROUGHTON SHIRT, MANTLE, UNDERCLOTHING, AND CORSET FACTORIES.

The shirts and mantles manufactured at Broughton are deserving of a much wider recognition than they have already received. They are warranted to be good value, and societies may have every confidence in them because they are manufactured in clean and healthy workrooms. It is not at all unlikely that clothing made in filthy sweating dens is responsible for carrying away disease germs from such tainted surroundings, so this question of clean and healthy workrooms is quite as important to the wearer as to the worker.

Work was commenced at the new factory, Broughton, in January, 1896. The ground floor is used as a cutting-room and stockroom, and the packing is carried on at one end. The second room is the machine-room, where the shirts, and also duck jackets, overalls, &c., for mechanics and factory operatives, are made. The third floor is a separate department for the manufacture of underclothing. The mantles used to occupy this third floor, but had to remove to the old Tailoring Factory further down the street, to get more room, and also to leave more for the Underclothing Department. Another department was commenced in October, 1898, for the manufacture of corsets, which now employs 57

hands. The Shirt Factory employs 96, the Mantles 51, and the Underclothing 51. So this section of the Broughton buildings alone employs over 250 people.

Honest work for honest pay is expected, with the result that purchaser and producer alike benefit. The Wholesale has resolutely set its face against sweating, and the successful operations in these much-sweated industries go far to show that better work and a greater production go hand in hand with good wages and fair conditions of labour.

BROUGHTON CLOTHING FACTORY.

This is the largest special order factory round Manchester. Established seven years ago, in 1892, it has already had to be moved several times in order to obtain the requisite accommodation. The new factory was built to hold 800 employés, to anticipate future progress a little. It is specially adapted to suit the requirements of the tailoring trade, and already employs close upon 500 people, earning nearly £20,000 a year, although only opened in June, 1897.

Special attention is given at Broughton to the order trade. Cutters are sent to the societies in the surrounding districts, who show the cloths and take measurements. The clothes are then made up, every attention being paid to the style, fit, and finish of each garment, and the result is a largely increasing trade. The system has been of great benefit to many societies, especially the smaller societies and those having no Tailoring Department, as it saves them the heavy expenses attaching to a competent cutter and a staff. After all, it is only a further proof of the advantages derivable from combination of interests.

LONGSIGHT PRINTING WORKS.

So large had the requirements of the Wholesale for printing, bookbinding, &c., grown, that it was deemed advisable to establish a Printing Department. In January, 1895, work was commenced in Holgate Street, Manchester, where very soon over 150 employés were busily engaged.

A distinct success from the beginning, the building in Holgate Street was soon found far too small, and in July, 1898, the business was transferred to the new works which had been erected at Longsight, about 2½ miles away. The new building is 220ft. square, and consists mainly of one great room, divided into three portions by low partitions. The first contains the heavy lithographic and letterpress printing machines. These are of the most modern type, capable of turning out very quickly the best class of work. The second portion is occupied by the compositors, and the third is used by the ruling and bookbinding departments. A

large basement, excavated under the composing and binding rooms, is used as a paper stockroom and for packing. Heavy machinery will also be put down here ultimately. The front of the building in Hamilton Road is two-storeyed, and contains the offices, the artists' room, and the Pattern-card Making Department.

All the machinery is driven by electricity, generated by powerful dynamos, each machine having its own motor. The same dynamos also supply the electric lighting. Many advantages are obtained by this system, not the least of which is initial economy, there being no gearing, shafting, and belts. All these are done away with, with the result that there is a remarkable freedom from dust and dirt and oil, and there is considerably less risk of accident to life and limb.

The publication of the "Wheatsheaf" is no light task. The circulation has now risen to over 170,000 copies monthly. The "Annual" for 1897, 1898, and 1899 were printed and bound in the Society's works, and gave further proof that the work turned out is second to none.

THE TOBACCO FACTORY.

The establishment of this factory was due to the rapid growth of the trade, which appeared to promise a profitable investment for the members of the C.W.S., the annual trade in tobacco, cigars, and snuff amounting to £215,000. Of this sum no less than 70 per cent represents the proportion paid for common tobacco of the class retailed at about 3d. per oz.

The Wholesale decided in 1896 to commence the manufacture of tobacco, and after mature consideration a building in Sharp Street, within easy reach of Balloon Street, was acquired, and fitted with all the necessary equipments for the business. Very soon after work was started it became apparent that extension would be imperative, and considerable additions have already been made to the original premises.

The result of the first 15½ weeks' working was a profit of £351. This was a remarkably good beginning, as it is not always possible to show a balance on the right side of the account during the first period of the working of a productive department. For the first year ending June, 1899, the profit realised was £3,312. At the present time (June) nearly eleven tons of manufactured tobacco are sent out every week, and the factory has secured more than half of the trade of the societies.

These facts afford weighty testimony to the excellence of the varieties of tobacco, and it is hoped that all Co-operative worshippers at the shrine of "baccas" will see that the incense they offer as a burnt sacrifice comes from the Sharp Street Factory.

WEST HARTLEPOOL LARD REFINERY.

The establishment of the Lard Refinery marked another step taken by the C.W.S. in the production of pure and wholesome articles of diet.

Although civilisation has made great advances during this century, we find that adulteration of food is not yet numbered with extinct evils.

Production for profit, with no consideration of moral obligation, is responsible for these injurious tricks of trade. Through the C.W.S. the Co-operators manufacture for themselves both food and clothing, and by this means the incentive to underhanded malpractices is abolished.

In addition to the refining of lard, a considerable trade is also done in the pickling of eggs, and the business promises to be a success, as a net profit of £3,152 has been recorded since its commencement in April, 1896.

LITTLEBOROUGH FLANNEL FACTORY.

This factory was, prior to its acquirement by the C.W.S., carried on under the title of the Lancashire and Yorkshire Productive Society.

The formation of this society was initiated in 1872, at a meeting of the united organisation of Yorkshire societies.

Looked at in the light of later events, it is interesting to note that in the discussion it was strongly urged that the Wholesale should undertake the work, but it was eventually decided to start the factory as an independent concern, only Co-operative societies and employés in the mill being admitted as shareholders.

From various causes the society was not successful, and in 1878 it was put into voluntary liquidation, with the late J. T. W. Mitchell as liquidator, and after Mr. Mitchell's death by Mr. Shillito.

It was then carried on until April, 1898, when it was purchased by the Wholesale Society, and so far the results have been perfectly satisfactory.

MEETINGS AND OTHER COMING EVENTS

IN CONNECTION WITH THE SOCIETY IN 1900.

Feb. 3—Saturday....Nomination Lists: Last day for receiving.

Mar. 6—Tuesday ....Voting Lists: Last day for receiving.

„ 10—Saturday....Newcastle and London Branch and Divisional Quarterly Meetings.

„ 17—Saturday....General Quarterly Meeting—Manchester.

May 5—Saturday....Nomination Lists: Last day for receiving.

June 5—Tuesday ....Voting Lists: Last day for receiving.

„ 9—Saturday....Newcastle and London Branch and Divisional Quarterly Meetings.

„ 16—Saturday....General Quarterly Meeting—Manchester.

„ 23—Saturday....Half-yearly Stocktaking.

Aug. 4—Saturday....Nomination Lists: Last day for receiving.

Sept. 4—Tuesday ....Voting Lists: Last day for receiving.

„ 8—Saturday....Newcastle and London Branch and Divisional Quarterly Meetings.

„ 15—Saturday....General Quarterly Meeting—Manchester.

Nov. 3—Saturday....Nomination Lists: Last day for receiving.

Dec. 4—Tuesday ....Voting Lists: Last day for receiving.

„ 8—Saturday....Newcastle and London Branch and Divisional Quarterly Meetings.

„ 15—Saturday....General Quarterly Meeting—Manchester.

„ 22—Saturday....Half-yearly Stocktaking.

PRINCIPAL EVENTS IN CONNECTION WITH THE CO-OPERATIVE WHOLESALE SOCIETY

SINCE ITS COMMENCEMENT.

Year.	Day.	Events.
1863 ..	Aug. 11 ..	Co-operative Wholesale Society enrolled.
1864 ..	Mar. 14 ..	Co-operative Wholesale Society commenced business.
1866 ..	April 24 ..	Tipperary Branch opened.
1868 ..	June 1 ..	Kilmallock Branch opened.
1869 ..	Mar. 1 ..	Balloon Street Warehouse opened.
„ ..	July 12 ..	Limerick Branch opened.
1871 ..	Nov. 26 ..	Newcastle-on-Tyne Branch opened.
1872 ..	July 1 ..	Manchester Boot and Shoe Department commenced.
„ ..	Oct. 14 ..	Bank Department commenced.
1873 ..	Jan. 13 ..	Crumpsall Works purchased.
„ ..	April 14 ..	Armagh Branch opened.
„ ..	June 2 ..	Manchester Drapery Department established.
„ ..	July 14 ..	Waterford Branch opened.
„ ..	Aug. 4 ..	Cheshire Branch opened.
„ ..	„ 4 ..	Leicester Works purchased.
„ ..	„ 16 ..	Insurance Fund established.
„ ..	Sept. 15 ..	Leicester Works commenced.
1874 ..	Feb. 2 ..	Tralee Branch opened.
„ ..	Mar. 9 ..	London Branch established.
„ ..	Oct. 5 ..	Durham Soap Works commenced.
1875 ..	April 2 ..	Liverpool Purchasing Department commenced.
„ ..	June 15 ..	Manchester Drapery Warehouse, Dantzic Street, opened.
1876 ..	Feb. 14 ..	Newcastle Branch Buildings, Waterloo Street, opened.
„ ..	„ 21 ..	New York Branch established.
„ ..	May 24 ..	S.S. "Plover" purchased.
„ ..	July 16 ..	Manchester Furnishing Department commenced.
„ ..	Aug. 5 ..	Leicester Works first Extensions opened.
1877 ..	Jan. 15 ..	Cork Branch established.
„ ..	Oct. 25 ..	Land in Liverpool purchased.

PRINCIPAL EVENTS IN CONNECTION WITH THE CO-OPERATIVE WHOLESALE SOCIETY

SINCE ITS COMMENCEMENT—*continued.*

YEAR.	DAY.	EVENTS.
1879 ..	Feb. 21 ..	S.S. "Pioneer," Launch of.
„ ..	Mar. 24 ..	Rouen Branch opened.
„ ..	„ 29 ..	S.S. "Pioneer," Trial trip.
„ ..	June 30 ..	Goole Forwarding Department opened.
1880 ..	Jan. 30 ..	S.S. "Plover" sold.
„ ..	July 27 ..	S.S. "Cambrian" purchased.
„ ..	Aug. 14 ..	Heckmondwike Boot and Shoe Works commenced.
„ ..	Sept. 27 ..	London Drapery Department commenced in new premises, 99, Leman Street.
1881 ..	June 6 ..	Copenhagen Branch opened.
1882 ..	Jan. 18 ..	Garston Forwarding Depôt commenced.
„ ..	Oct. 31 ..	Leeds Saleroom opened.
„ ..	Nov. 1 ..	London Tea and Coffee Department commenced.
1883 ..	July 21 ..	S.S. "Marianne Briggs" purchased.
1884 ..	April 7 ..	Hamburg Branch commenced.
„ ..	May 31 ..	Leicester Works second Extensions opened.
„ ..	June 25 ..	Newcastle Branch—New Drapery Warehouse opened.
„ ..	Sept. 13 ..	Commemoration of the Society's Twenty-first Anniversary at Newcastle-on-Tyne and London.
„ ..	„ 20 ..	Commemoration of the Society's Twenty-first Anniversary at Manchester.
„ ..	„ 29 ..	Bristol Depôt commenced.
„ ..	Oct. 6 ..	S.S. "Progress," Launch of.
1885 ..	Aug. 25 ..	Huddersfield Saleroom opened.
„ ..	Dec. 30 ..	Fire—Tea Department, London.
1886 ..	April 22 ..	Nottingham Saleroom opened.
„ ..	Aug. 25 ..	Longton Crockery Depôt opened.
„ ..	Oct. 12 ..	S.S. "Federation," Launch of.
1887 ..	Mar. 14 ..	Batley Mill commenced.
„ ..	June 1 ..	S.S. "Progress" damaged by fire at Hamburg.
„ ..	July 21 ..	Manchester—New Furnishing Warehouse opened.
„ ..	Aug. 29 ..	Heckmondwike—Currying Department commenced.
„ ..	Nov. 2 ..	London Branch—New Warehouse opened.
„ ..	„ 2 ..	Manufacture of Cocoa and Chocolate commenced.

PRINCIPAL EVENTS IN CONNECTION WITH THE CO-OPERATIVE WHOLESALE SOCIETY

SINCE ITS COMMENCEMENT—*continued.*

Year.	Day.	Events.
1888 ..	July 7 ..	S.S. "Equity," Launch of.
„ ..	Sept. 8 ..	S.S. "Equity," Trial trip.
„ ..	„ 27 ..	S.S. "Cambrian" sold.
„ ..	Oct. 14 ..	Fire—Newcastle Branch.
1889 ..	Feb. 18 ..	Enderby Extension opened.
„ ..	Nov. 11 ..	Longton Depôt—New Premises opened.
1890 ..	Mar. 10 ..	S.S. "Liberty," Trial trip.
„ ..	May 16 ..	Blackburn Saleroom opened.
„ ..	June 10 ..	Leeds Clothing Factory commenced.
„ ..	Oct. 22 ..	Northampton Saleroom opened.
1891 ..	April 18 ..	Dunston Corn Mill opened.
„ ..	Oct. 22 ..	Cardiff Saleroom opened.
„ ..	Nov. 4 ..	Leicester New Works opened.
„ ..	„ 16 ..	Aarhus Branch opened.
„ ..	Dec. 24 ..	Fire at Crumpsall Works.
1892 ..	May 5 ..	Birmingham Saleroom opened.
1893 ..	„ 8 ..	Broughton Cabinet Factory opened.
1894 ..	June 29 ..	Montreal Branch opened.
1895 ..	Jan. 23 ..	Printing Department commenced.
„ ..	Aug. 5 ..	Gothenburg Branch opened.
„ ..	Oct. 2 ..	Irlam Soap Works opened.
„ ..	„ 10 ..	Loss of the S.S. "Unity."
1896 ..	April 24 ..	West Hartlepool Refinery purchased.
„ ..	June 26 ..	Middleton Preserve Works commenced.
„ ..	June 13 ..	Roden Estate purchased.
„ ..	July 1 ..	"Wheatsheaf" Record—first publication.
1897 ..	Feb. 10 ..	New Northampton Saleroom opened.
„ ..	Mar. 1 ..	Manufacture of Candles commenced at Irlam.
„ ..	„ 22 ..	New Tea Department Buildings opened.
„ ..	Aug. 7 ..	Sydney Depôt commenced.
„ ..	Sept. 16 ..	Banbury Creamery opened.
1898 ..	April 1 ..	Littleboro' Flannel Mill acquired.
„ ..	May 9 ..	Tobacco Factory commenced.
„ ..	July 11 ..	Longsight Printing Works commenced.
„ ..	Oct. 20 ..	Corset Factory commenced.

List of Telegraphic Addresses.

CENTRAL, MANCHESTER:
"WHOLESALE, MANCHESTER."

NEWCASTLE BRANCH:
"WHOLESALE, NEWCASTLE-ON-TYNE."

LONDON BRANCH:
"WHOLESALE, LONDON."

BRISTOL DEPÔT:
"WHOLESALE, BRISTOL."

LIVERPOOL OFFICE AND WAREHOUSE:
"WHOLESALE, LIVERPOOL."

LEEDS SALE AND SAMPLE ROOMS:
"WHOLESALE, LEEDS."

CRUMPSALL WORKS:
"BISCUIT, MANCHESTER."

MIDDLETON PRESERVE WORKS:
"WHOLESALE, MIDDLETON JUNCTION."

IRLAM SOAP WORKS:
"WHOLESALE, CADISHEAD."

CARDIFF SALEROOM:
"WHOLESALE, CARDIFF."

LEICESTER SHOE WORKS:
"WHOLESALE, LEICESTER."

HECKMONDWIKE SHOE WORKS:
"WHOLESALE, HECKMONDWIKE."

BATLEY WOOLLEN MILL:
"WHOLESALE, BATLEY."

LEEDS READY-MADES FACTORY:
"SOCIETY, LEEDS."

LONGTON CROCKERY DEPÔT:
"WHOLESALE, LONGTON (STAFF.)."

CORN MILL, DUNSTON-ON-TYNE:
"WHOLESALE, DUNSTON, GATESHEAD."

NORTHAMPTON SALEROOM:
"WHOLESALE, NORTHAMPTON."

TOBACCO FACTORY:
"TOBACCO, MANCHESTER."

LONGSIGHT PRINTING WORKS:
"TYPOGRAPHY, MANCHESTER."

LITTLEBOROUGH FLANNEL MILLS:
"WHOLESALE, LITTLEBOROUGH."

HARTLEPOOL LARD REFINERY:
"WHOLESALE, WEST HARTLEPOOL."

Telephonic Communication.

Our Premises in the following towns are directly connected with the Local Telephone System :—

	Nos.
MANCHESTER—GENERAL OFFICES	802
„ „ „	2777
„ DRAPERY DEPARTMENT	908
„ BOOT AND SHOE DEPARTMENT	3546
„ FURNISHING DEPARTMENT	1755
CRUMPSALL—Sub to MANCHESTER GENERAL OFFICES.	802A
BROUGHTON—CABINET WORKS	3063
NEWCASTLE—West Blandford Street	1260
„ „ „ „	1787
„ „ „ „	1989
„ „ „ „	*284
„ Waterloo Street	*284
„ Quayside Shed	*276 and 1710
LONDON—GENERAL OFFICE	2591
„ GROCERY SALEROOM	5572
„ DRAPERY	5571
„ TEA DEPARTMENT	5570
„ FURNISHING and BOOT DEPARTMENT	2592
BRISTOL—OFFICE	40
„ SALEROOM	940
LIVERPOOL	397
GARSTON	6
GOOLE	2
LEICESTER	235
LONGTON	4016
DUNSTON	1261
„	*2
LEEDS READY-MADES, HOLBECK	1648
WEST HARTLEPOOL REFINERY	286
MIDDLETON—PRESERVE WORKS (Failsworth)	33

*Post Office System. All others National Telephone Company.

CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

PAST MEMBERS OF GENERAL COMMITTEE.

Name.	Address.	Elected.	Retired.
*A. Greenwood	Rochdale	1863 August	1870 August.
†Councillor Smithies	Rochdale	1863 August	1869 May.
§James Dyson	Manchester	1863 August	1867 May.
Edward Hooson	Manchester	1863 August	1864 March.
		1866 May	1869 Dec.
John Hilton	Middleton	1863 August	1868 Nov.
*James Crabtree	Heckmondwike	1863 August	1864 March.
		1865 Nov.	1874 May.
		1885 Dec.	1886 March.
		1886 June	1889 Dec.
Joseph Thomasson	Oldham	1863 August	1864 March.
		1866 May	1869 Nov.
Charles Howarth	Heywood	1864 March	1866 October.
J. Neild	Mossley	1864 March	1865 Nov.
		1867 Nov.	1868 Nov.
Thomas Cheetham	Rochdale	1864 March	1865 Nov.
W. Nuttall	Oldham	1865 Nov.	1866 Feb.
		1876 June	1877 Dec.
§E. Longfield	Manchester	1867 May	1867 Nov.
†J. M. Percival	Manchester	1868 Feb.	1868 May.
		1870 Feb.	1872 August.
		1876 March	1882 June.
Isaiah Lee	Oldham	1867 Nov.	1868 Nov.
§D. Baxter	Manchester	1868 May	1871 May.
J. Swindells	Hyde	1868 Nov.	1869 Nov.
T. Sutcliffe	Todmorden	1868 Nov.	1869 Nov.
‡James C. Fox	Manchester	1868 Nov.	1871 May.
W. Marcroft	Oldham	1869 May	1871 May.
Thomas Pearson	Eccles	1869 Nov.	1871 Nov.
R. Holgate	Over Darwen	1869 Nov.	1870 Nov.
A. Mitchell	Rochdale	1870 August	1870 Nov.
W. Moore	Batley Carr	1870 Nov.	1871 August.
‡Titus Hall	Bradford	1871 May	1874 Dec.
		1877 June	1885 Dec.

PAST MEMBERS OF GENERAL COMMITTEE—*continued.*

Name.	Address.	Elected.	Retired.
B. Hague	Barnsley	1871 May 1874 Dec.	1873 May. 1884 Sept.
Thomas Shorrocks	Over Darwen	1871 May	1871 Nov.
‡R. Allen	Oldham	1871 August	1877 April.
Job Whiteley	Halifax	1871 August 1873 Feb.	1872 Feb. 1874 Feb.
‡Thomas Hayes	Failsworth	1871 Nov.	1873 August.
Jonathan Fishwick	Bolton	1871 Nov.	1872 Feb.
J. Thorpe	Halifax	1872 Feb.	1873 Feb.
‡W. Johnson	Bolton	1872 Feb. 1877 June	1876 June. 1885 March.
§H. Whiley	Manchester	1872 August 1874 May	1874 Feb. 1876 March.
J. Butcher	Banbury	1873 May	1873 August.
H. Atkinson	Blaydon-on-Tyne	1873 August	1874 Dec.
J. F. Brearley	Oldham	1874 Feb.	1874 Dec.
Robert Cooper	Accrington	1874 Feb.	1876 June.
H. Jackson	Halifax	1874 Dec.	1876 June.
J. Pickersgill	Batley Carr	1874 Dec.	1877 March.
W. Barnett	Macclesfield	1874 Dec.	1882 Sept.
John Stansfield	Heckmondwike	1874 Dec.	1898 June.
S. Lever	Bacup	1876 Sept. 1886 March	1885 Sept. 1888 May.
F. R. Stephenson	Halifax	1876 Sept.	1877 March.
R. Whittle	Crewe	1877 Dec.	1886 March.
‡Thos. Swann	Masborough	1882 Sept.	1899 Feb.
Joseph Mc.Nab	Hyde	1883 Dec.	1886 March.
James Hilton	Oldham	1884 Sept.	1890 January.
Samuel Taylor	Bolton	1885 Sept.	1891 Dec.
William P. Hemm	Nottingham	1888 Sept.	1889 August.
H. C. Pingstone	Manchester	1886 March	1894 June.
*§J. T. W. Mitchell	Rochdale	1869 Nov.	1895 March.
E. Hibbert	Failsworth	1882 Sept.	1895 June.
James Lownds	Ashton-under-Lyne	1885 March	1895 July.

* Held Office as President.
‡ Held Office as Secretary.
† Held Office as Secretary and Treasurer.
§ Held Office as Treasurer.

* PAST MEMBERS OF NEWCASTLE BRANCH COMMITTEE.

Name.	Address.	Elected.	Retired.
George Dover	Chester-le-Street ...	1874 Dec.	1877 Sept.
Humphrey Atkinson ..	Blaydon-on-Tyne ..	1874 Dec.	1879 May.
†James Patterson.....	West Cramlington ..	1874 Dec.	1877 Sept.
John Steel	Newcastle-on-Tyne ..	1874 Dec.	1876 Sept.
William Green	Durham	1874 Dec.	1891 Sept.
Thomas Pinkney	Newbottle	1874 Dec.	1875 March.
†John Thirlaway	Gateshead	1876 Dec.	1892 May.
William Robinson	Shotley Bridge	1877 Sept.	1884 June.
William J. Howat	Newcastle-on-Tyne ..	1877 Dec.	1883 Dec.
J. Atkinson	Wallsend	1883 Dec.	1890 May.
George Fryer	Cramlington	1883 Dec.	1887 Dec.
Matthew Bates	Newcastle-on-Tyne ..	1884 June	1893 June.
Richard Thomson	Sunderland	1874 Dec.	1893 Sept.
George Scott	Newbottle	1879 May	1893 Dec.

* PAST MEMBERS OF LONDON BRANCH COMMITTEE.

Name.	Address.	Elected.	Retired.
J. Durrant	Arundel	1874 Dec.	1875 Dec.
John Green	Woolwich.....	1874 Dec.	1876 Dec.
†Thomas Fowe	Buckfastleigh	1874 Dec.	1878 March.
†William Strawn	Sheerness	1875 Dec.	1882 March.
Frederick Lamb.....	Banbury	1876 Dec.	1888 Dec.
F. A. Williams	Reading	1882 June	1886 Sept.
J. J. B. Beach	Colchester	1886 Dec.	1888 Dec.
T. E. Webb	Battersea	1874 Dec.	1896 Dec.

* Newcastle and London Branch Committees constituted December, 1874.
† Held Office as Secretary.

CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

MEMBERS OF GENERAL, AND NEWCASTLE AND LONDON BRANCH COMMITTEES WHO HAVE DIED DURING TIME OF OFFICE.

NAME.	ADDRESS.	DATE OF DEATH.
	GENERAL.	
Edward Hooson.....	Manchester.....	December 11th, 1869.
Robert Allen	Oldham	April 2nd, 1877.
Richard Whittle	Crewe	March 6th, 1886.
Samuel Lever.....	Bacup	May 18th, 1888.
William P. Hemm	Nottingham	August 21st, 1889.
James Hilton.....	Oldham	January 18th, 1890.
Samuel Taylor	Bolton	December 15th, 1891.
J. T. W. Mitchell	Rochdale.....	March 16th, 1895.
E. Hibbert	Failsworth	June 25th, 1895.
James Lownds	Ashton-un-Lyne. .	July 27th, 1895.
Thos. Swann	Masboro'	February 15th, 1899.
	NEWCASTLE.	
J. Atkinson.....	Wallsend.....	May 25th, 1890.
William Green	Durham	September 9th, 1891.
John Thirlaway.....	Gateshead	May 1st, 1892.
	LONDON.	
J. J. B. Beach	Colchester	December 21st, 1888.
T. E. Webb.....	Battersea	December 2nd, 1896.

LIST OF CO-OPERATIVE CONGRESSES AND PRESIDENTS.

(Compiled by the Co-operative Union.)

No.	Year.	Date of Opening.	Where Held.	President of First Day.	President of Second Day.	President of Third Day.
1	1869	May 31	London: Society of Arts, John Street, Adelphi.	T. Hughes, M.P.....	A. J. Mundella, M.P.	W. Morrison, M.P.
2	1870	June 6	Manchester: Memorial Hall.....	W. Morrison, M.P.....	Rev. W. N. Molesworth, M.A.	J. T. Hibbert, M.P.
3	1871	April 10	Birmingham: Midland Institute....	Hon. Auberon Herbert, M.P.	C. Cattell.....	W. Morrison, M.P.
4	1872	,, 1	Bolton: Co-operative Hall.....	T. Hughes, M.P.....	E. V. Neale.....	W. Morrison, M.P.
5	1873	,, 12	Newcastle-on-Tyne: Mechanics' Institute.	Joseph Cowen, jun. ..	W. Morrison, M.P..	T. Hughes, M.P.
6	1874	,, 6	Halifax: Mechanics' Hall	Thomas Brassey, M.P.	W. Morrison	W. Morrison.
7	1875	Mar. 29	London: Co-operative Institute	Professor T. Rogers ..	T. Hughes, Q.C.....	W. Morrison.
8	1876	April 17	Glasgow: Assembly Rooms, 138, Bath Street.	*Professor Caird	G. Anderson, M.P. ..	James Crabtree.
9	1877	,, 2	Leicester: Museum Hall	Hon. Auberon Herbert.	Lloyd Jones	Abraham Greenwood.
10	1878	,, 22	Manchester: Co-operative Hall, Downing Street.	Marquis of Ripon	Bishop of Manchester	Dr. John Watts.
11	1879	,, 14	Gloucester: Corn Exchange	Professor Stuart.....	J. T. W. Mitchell ..	James Crabtree.
12	1880	May 17	Newcastle-on-Tyne: Bath Lane Schoolroom.	Bishop of Durham....	R. S. Watson	H. R. Bailey.
13	1881	June 6	Leeds: Albert Hall	Lord Derby	T. Hughes, Q.C.....	James Crabtree.
14	1882	May 29	Oxford: Town Hall.....	Lord Reay	Councillor Pumphrey	George Hines.

LIST OF CO-OPERATIVE CONGRESSES AND PRESIDENTS—*continued.*

No.	Year.	Date of Opening.	Where Held.	President of First Day.	President of Second Day.	President of Third Day.
15	1883	May 14	Edinburgh: Oddfellows' Hall	Rt. Hon. W. E. Baxter, M.P.	William Maxwell ..	John Allan.
16	1884	June 2	Derby: Lecture Hall	Sedley Taylor, M.A. ..	A. Scotton	Councillor Hartley.
17	1885	May 25	Oldham: Co-operative Hall, King St.	Lloyd Jones.....	F. Hardern.....	Lewis Feber.
18	1886	June 14	Plymouth: Guildhall	Earl of Morley	A. H. D. Acland, M.P.	J. H. Young.
19	1887	May 30	Carlisle: Her Majesty's Theatre	G. J. Holyoake	Sir W. Lawson, M.P.	Councillor Rule.
20	1888	„ 21	Dewsbury: Co-operative Hall	E. V. Neale	Marquis of Ripon ..	John Cave, jun.
21	1889	June 10	Ipswich: Public Hall.....	Professor A. Marshall..	B. Jones	George Hines.
22	1890	May 26	Glasgow: City Hall.....	Earl of Rosebery.....	William Maxwell ..	James Deans.
23	1891	„ 18	Lincoln: Drill Hall.....	A. H. D. Acland, M.P..	D. Mc.Innes	J. Hepworth.
24	1892	June 6	Rochdale: Baillie Street Chapel	J. T. W. Mitchell, J.P..	A. Greenwood.....	Councillor Cheetham.
25	1893	May 22	Bristol: Hall of the Y.M.C.A.	Councillor G. Hawkins.	J. Clay, J.P.	W. H. Brown, C.C.
26	1894	„ 14	Sunderland: Victoria Hall	T. Tweddell, J.P., F.R.G.S.	J. M'Kendrick	W. Crooks.
27	1895	June 3	Huddersfield: Town Hall	Geo. Thomson.....	T. Bland, J.P.....	Jas. Broadbent.
28	1896	May 25	Woolwich: Tabernacle, Beresford St.	†B. Jones	B. Jones	B. Jones.
29	1897	June 7	Perth: City Hall.....	Wm. Maxwell, J.P.....	Wm. Maxwell, J.P..	Wm. Maxwell, J.P.
30	1898	May 30	Peterborough: Theatre Royal, Broadway.	‡D. Mc.Innes.....	D. Mc.Innes	D. Mc.Innes.
31	1899	„ 22	Liverpool: St. George's Hall.....	F. Hardern, J.P.....	F. Hardern, J.P. ..	F. Hardern, J.P.

* Inaugural Address delivered by Prof. Hodgson. † Inaugural Address delivered by Earl of Winchilsea. ‡ Inaugural Address delivered by Bishop of London.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869,

TOGETHER WITH NAMES OF WRITERS.

(Compiled by the Co-operative Union.)

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
1	1869	London.....	Trade Unions and Co-operation	John Frearson.
2	„	„	The North of England Co-operative Wholesale Society	W. Nuttall.
3	„	„	Co-operation: How to Secure Safe Progress Therein.....	Dr. John Watts.
4	„	„	Associated Homes	Col. Henry Clinton.
5	„	„	Higher Aims of Co-operation and How to Realise Them.....	Dr. Travis.
6	„	„	Organisation and Co-operation	— Bray.
7	„	„	The Principles of Co-operation as Applied to Credit.....	R. B. D. Morier.
8	„	„	The Best Means of Making Co-operative Societies Mutually Helpful	Rev. W. N. Molesworth.
9	„	„	Self-supporting Educational Establishments	Ion Perdicaris.
10	„	„	Co-operative Libraries and the Principles on which they should be Formed and Managed.	W. E. A. Axon, F.R.S.L.
11	„	„	Industrial Partnerships	A. Briggs.
12	„	„	Co-operative Organisation and Propaganda.....	W. Pare, F.S.S.
13	„	„	National Co-operative Organisation	J. Borrowman.
14	„	„	Land, Labour, and Capital	E. T. Craig.
15	„	„	A London Co-operative Board.....	G. J. Holyoake.
16	„	„	The Claims of Co-operative Societies to the Use of Public Land for Agricultural and Building Purposes.	T. Hare.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
17	1869	London.....	Causes of Failure in Co-operative Stores.....	R. Harper.
18	„	„	„ „ „ „	N. Wilkinson.
19	„	„	„ „ „ „	J. C. Farn.
20	„	„	Hindrances to Co-operation	J. T. Mc.Innes.
21	„	„	Co-operative Production	Malcolm Macleod.
22	„	„	Co-operative Trading Companies	J. Samuelson.
23	1870	Manchester	The Relation of Trade and other Societies to the Co-operative Movement.	Malcolm Macleod.
24	„	„	Co-operative Cottage Building	W. Nuttall.
25	„	„	Co-operative Newspaper	Lloyd Jones.
26	„	„	Co-operative Bank.....	W. Pare.
27	„	„	Prospects and Objects of Co-operation.....	E. V. Neale.
28	„	„	The Amendment of the Law relating to Co-operative Societies.....	J. M. Ludlow.
29	„	„	Co-operation and Education	T. Slater.
30	1871	Birmingham	The More Complete Organisation of the Co-operative Body	R. Bailey Walker.
31	„	„	Co-operative Insurance.....	A. Howard.
32	„	„	Co-operation and Trade Unions	H. R. Slatter.
33	„	„	People's Banks	R. B. D. Morier, C.B.
34	„	„	The Establishment of a Co-operative Bank	Anonymous.
35	„	„	Co-operative Industrial Colleges.....	W. Pare, F.S.S.
36	„	„	The State of the Law affecting Co-operative Societies	E. V. Neale.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
37	1871	Birmingham	London Co-operative Agency	R. Stephens.
38	1872	Bolton	Mutual Guarantee.....	E. O. Greening.
39	,,	,, ...	The Check System.....	J. Borrowman.
40	,,	,, ...	A Plea for Checking the Cash taken by Salesmen	J. Watt.
41	,,	,, ...	Co-operative Check System.....	W. Nuttall.
42	,,	,, ...	Productive Co-operation	J. Borrowman.
43	,,	,, ...	Production of Flour by the Wholesale Society	— Mc.Pherson.
44	,,	,, ...	How to Dispose of the Surplus Capital of Co-operative Societies	F. Smith.
45	,,	,, ...	Co-operative Agriculture	R. Stapleton.
46	,,	,, ...	How the Rapidly Accumulating Capital of Co-operators may be Best Employed.	E. T. Craig.
47	,,	,, ...	Federative Trading	Lloyd Jones.
48	,,	,, ...	The Extension of Wholesale Co-operative Societies	J. Borrowman.
49	1873	Newcastle-on-Tyne	The Most Efficient and Practical Plan of Arranging the Powers and Duties of the Central Board.	E. V. Neale.
50	,,	,,	Principles and Methods of Voting.....	J. T. Mc.Innes.
51	,,	,,	The Best Means of Promoting Co-operative Production	J. Borrowman.
52	,,	,,	,, ,, ,, ,, ,, ...	G. J. Holyoake.
53	,,	,,	Some Hints on the Problem of Co-operative Production.....	J. M. Ludlow.
54	,,	,,	The *Co-operative News*.....	T. Hayes.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
55	1873	Newcastle-on-Tyne	The Journalism of the Movement	G. J. Holyoake.
56	,,	,,	How to Increase Co-operation	P. H. Holland.
57	,,	,,	The Highest Form of Co-operation	Dr. Henry Travis.
58	1874	Halifax	Mode of Appointing the Central Board	E. V. Neale.
59	,,	,,	The Leakage Question	— Whiteley.
60	,,	,,	The Progress and Consolidation of Co-operation	Lloyd Jones.
61	,,	,,	The Future of Labour in Co-operation	E. O. Greening.
62	,,	,,	Co-operative Production	J. Borrowman.
63	,,	,,	A Plea for a Truly Co-operative Press	E. O. Greening.
64	,,	,,	The Best Form of the Co-operative Organ	J. T. Mc.Innes.
65	,,	,,	Co-operative Propaganda	G. J. Holyoake.
66	,,	,,	Higher Education on Co-operative Principles	— Cunningham.
67	,,	,,	Equitable Distribution of Profits	J. Holmes.
68	,,	,,	Trade Unions in Relation to Co-operation	Lloyd Jones.
69	1875	London	The Schulze-Delitzsch System of Banking	W. Morrison.
70	,,	,,	Co-operation *v.* Individualism	R. Kyle.
71	,,	,,	Co-operative Production	E. O. Greening.
72	,,	,,	The Management of Productive Societies	F. Smith.
73	,,	,,	The Management and Best Form of Constitution to be given to Productive Societies, &c.	E. V. Neale.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
74	1875	London	The Present State of the Co-operative Movement and the Future before it	Bailey Walker.
75	,,	,,	Proposal of a National Industrial Orphanage	Dr. Rutherford.
76	,,	,,	Proposal for the Establishment of International Co-operation	G. J. Holyoake.
77	,,	,,	International Co-operation	Dr. Worrall.
78	,,	,,	Trade Societies' Funds and Co-operative Production	Lloyd Jones.
79	1876	Glasgow	The Policy of Paying High Dividends	E. V. Neale.
80	,,	,,	Organisation for Propaganda	J. Smith.
81	,,	,,	Co-operation and Trades Unionism	H. R. Slatter.
82	,,	,,	Hindrances to Productive Co-operation	R. Kyle.
83	,,	,,	How to Diminish the Risks and Increase the Benefits of Productive Co-operation.	W. Campbell.
84	,,	,,	Associated Healthy Dwellings; or, a New Plan of Practical Propaganda	E. T. Craig.
85	1877	Leicester	Banking	T. Hughes.
86	,,	,,	A Special Means of Safe and Profitable Investment	W. Campbell.
87	,,	,,	The Accumulation of Capital	E. T. Craig.
88	,,	,,	How should Labour be Paid in Co-operation?	Lloyd Jones.
89	,,	,,	The Relation of Capital and Labour when engaged in Co-operative Production.	F. Smith.
90	,,	,,	Labour in Co-operative Workshops	J. Smith.
91	,,	,,	What Trade Unionists Might Do for the Worker through Co-operation	E. V. Neale.
92	,,	,,	Trade Unions and Co-operation	H. R. Slatter.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
93	1877	Leicester	Store Management	Lloyd Jones.
94	„	„	The Proper Position of Labour in the Co-operative Movement	R. Kyle.
95	„	„	The Place of the Labourer in Co-operation.....	J. Greenwood.
96	„	„	The Failures of Industrial Partnerships	E. O. Greening.
97	„	„	Diffusion of the *Co-operative News*	G. J. Holyoake.
98	„	„	Re-establishment of Labour Exchanges	„
99	„	„	Educational Funds	G. Hines.
100	„	„	The Necessity of Co-operative Education, &c.....	J. Holmes.
101	1878	Manchester	Working Men's Clubs	Hodgson Pratt.
102	„	„	Co-operative Friendly Society.....	J. Odgers.
103	„	„	Co-operation and Culture.....	J. H. Jones.
104	„	„	The Development, Promotion, and Benefits of Education	R. Kyle.
105	„	„	Voluntary Propagandist Efforts.....	E. V. Neale.
106	1879	Gloucester	The Co-operative Union: Its Work, Duties, and Machinery.....	J. Borrowman.
107	„	„	„ „ „ „ „	R. Kyle.
108	„	„	„ „ „ „ „	E. V. Neale.
109	„	„	Co-operative Production	J. Odgers.
110	„	„	Spread of Co-operation in Agricultural Villages, &c.....	G. Hines.
111	„	„	„ „ „ „	W. H. Hall.
112	„	„	The Attitude of the Co-operative Movement to Private Trade	E. V. Neale.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
113	1879	Gloucester	A Co-operative Review, &c.....	E. T. Craig.
114	„	„	„ „	R. Newton.
115	„	„	A Co-operative Orphanage	Dr. Rutherford.
116	1880	Newcastle-on-Tyne	The Co-operative Union	R. Kyle.
117	„	„	Productive Co-operation	W. Swallow.
118	„	„	Wholesale Co-operation	Lloyd Jones.
119	„	„	Store Management	G. Scott.
120	„	„	Co-operative Cottage Building and the Land Question.....	T. Thirlaway.
121	„	„	Co-operation and the Perils of Credit	G. Hines.
122	„	„	The Land	E. V. Neale.
123	„	„	Education in Connection with Co-operation.....	J. Holmes.
124	1881	Leeds	Surplus Funds	J. Smith.
125	„	„	„ „	J. Crabtree.
126	„	„	The Land Question in Connection with Co-operation.....	Lloyd Jones.
127	„	„	Co-operative Production	J. Hepworth.
128	„	„	The Fundamental Principles of Co-operation.....	A. Greenwood.
129	„	„	Manual of Auditing	R. J. Milburne.
130	„	„	Organisation and Education	J. Holmes.
131	„	„	The Constitution of the Central Board	H. R. Bailey.
132	1882	Oxford	The Banking Question	J. Crabtree.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
133	1882	Oxford	The Banking Question	T. Hughes, Q.C.
134	„	„	Co-operation and Agriculture	Rev. G. W. Kitchin.
135	„	„	The Education of Co-operators	Arnold Toynbee.
136	„	„	„ „ „	B. Jones.
137	„	„	The Revenue of the Central Board	John Allan.
138	„	„	„ „ „	G. J. Holyoake.
139	1883	Edinburgh	The Present Position and Future Development of Co-operation	A. H. D. Acland.
140	„	„	„ „ „ „	J. Lochhead.
141	„	„	The Banking Question	E. V. Neale.
142	„	„	Utilisation of Surplus Capital	Lloyd Jones.
143	„	„	„ „ „	J. Lord.
144	„	„	The Best Means of Propagating Co-operation in Large Towns	J. Mc.Nair.
145	„	„	„ „ „ „	W. Nuttall.
146	1884	Derby	The Nationalisation of the Land	G. Purcell.
147	„	„	Co-operative Farming	D. Johnson.
148	„	„	Surplus Capital	W. T. Nutter.
149	„	„	„ „	J. Hepworth.
150	„	„	The Economic Aspect of Co-operation	E. V. Neale.
151	1885	Oldham	The Limited Liability Movement in Oldham	F. Hardern.
152	„	„	Difficulties of Productive Co-operation	T. W. Fenton.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
153	1885	Oldham	The Rise and Progress of Co-operation in Oldham	L. Feber.
154	„	„	Education in Connection with Co-operation	W. Crooks.
155	„	„	The Future of the Working Classes	E. O. Greening.
156	1886	Plymouth	Co-operative Education	Miss Sharp.
157	„	„	„ „	J. H. Jones.
158	„	„	Co-operative Production	J. C. Gray.
159	„	„	„ „	W. Swallow.
160	„	„	The Common Sense of Co-operation	E. V. Neale.
161	1887	Carlisle	Co-operative Agriculture	D. Mc.Innes.
162	„	„	„ „	W. G. Loveday.
163	„	„	Co-operative and Competitive Trade and Dividends	D. Thomson.
164	„	„	„ „ „ „	T. Ritchie.
165	1888	Dewsbury.....	What should be the True Relations between a Wholesale Distributive Society and the Productive Societies whose work it may sell?	G. E. Quirk.
166	„	„	What should be the True Relations between a Wholesale Distributive Society and the Productive Societies whose work it may sell?	C. Shufflebotham.
167	„	„	Ought Productive Works to be carried on as Departments of Wholesale Societies; if so, under what conditions?	C. Shufflebotham.
168	„	„	Ought Productive Works to be carried on as Departments of Wholesale Societies; if so, under what conditions?	E. Copland.
169	1889	Ipswich	The Credit System	W. Swallow.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
170	1889	Ipswich	Co-operation and International Commerce	Vaughan Nash.
171	1890	Glasgow	The Relations between Co-operation and Socialistic Aspirations	Miss M. L. Davies.
172	,,	,, ...	Cash and Check Systems.....	J. Thirlaway.
173	,,	,, ...	Co-operation in Ireland	Hon. H. C. Plunkett.
174	,,	,, ...	Labour, Capital, and Consumption	E. S. Bycraft.
175	1891	Lincoln.....	The Best Method of bringing Co-operation within the Reach of the Poorest of the Population.	Sydney Webb.
176	,,	,, ...	How Best to Consolidate and Improve the Position of Productive Societies.	W. G. Harrison.
177	,,	,, ...	The Best Means of bringing Co-operation and Trades Unions into closer union.	J. Arnold.
178	,,	,, ...	How Best to Utilise the Increasing Surplus Capital of the Movement....	A. Maskery.
179	1892	Rochdale	The Best Method of Consolidating and Federating Existing Productive Effort.	J. Deans.
180	,,	,, ...	The Duties of Co-operators in Regard to the Hours and Conditions of Labour.	Tom Mann.
181	,,	,, ...	How Best to Do Away with the Sweating System	Miss Beatrice Potter.
182	1893	Bristol	The Relation of Employés to the Co-operative Movement	W. Maxwell.
183	,,	,, ...	Overlapping, its Varieties and Dangers	C. J. Beckett.
184	,,	,, ...	The Position Co-operators ought to take with regard to the Social and Industrial Problems of the Present Day.	R. H. Tutt.
185	1894	Sunderland	Store Management	W. Openshaw.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
186	1894	Sunderland	Co-operative Agriculture	W. Campbell.
187	1895	Huddersfield	Agriculture as Applied to the Agricultural Population and to Agriculture.	D. Mc.Innes.
188	1896	Woolwich	The Relation of the Co-operative Movement to National and International Commerce.	A. Williams.
189	„	„	Are Modifications in the Rochdale System of Co-operation necessary to Meet the Needs of Great Centres of Population?	G. Hawkins.
190	1897	Perth	The Rights and Privileges of Citizens, with special reference to the Scottish Traders' Agitation against the Co-operative Movement.	W. E. Snell.
191	„	„	Superannuation of Co-operative Employés	R. J. Wilson.
192	1898	Peterborough	Co-operative Credit Banking	H. W. Wolff.
193	„	„	Co-operation in Agriculture	J. C. Gray.
194	1899	Liverpool	How to Make Co-operation succeed in Large Centres of Population.....	E. O. Greening.

STATISTICS

SHOWING THE PROGRESS

OF THE

CO-OPERATIVE WHOLESALE SOCIETY

LIMITED,

FROM COMMENCEMENT IN

1864 TO 1898.

PROGRESS FROM COMMENCEMENT, FROM

Year ending	£5 Shares taken up.	No. of Members belonging to our Shareholders.	Capital. Shares.	Loans and Deposits.	Trade and Bank Reserve Fund.	Insurance Fund.	Reserved Balances.	Total.	Net Sales.
			£	£	£	£	£	£	£
October, 1864 (30 weeks)	..	18,337	2,455	Included in Shares.	..	..	..	2,455	51,857
„ 1865	..	24,005	7,182		..	..	..	7,182	120,754
„ 1866	..	31,030	10,968		82	..	..	11,050	175,489
January, 1868 (65 weeks)	..	59,349	11,276	14,355	682	..	..	26,313	331,744
„ 1869	..	74,737	14,888	16,059	1,115	..	..	32,062	412,240
„ 1870	..	79,245	16,556	22,822	1,280	..	..	40,658	507,217
„ 1871 (53 weeks)	..	89,880	19,015	22,323	2,826	..	..	44,164	677,734
„ 1872	5,835	114,588	24,410	25,768	1,910	..	..	52,088	758,764
„ 1873	6,949	134,276	31,352	112,589	2,916	..	..	146,857	1,153,132
„ 1874	13,899	168,985	48,126	147,949	1,613	2,356	..	200,044	1,636,950
„ 1875	17,326	198,608	60,930	193,594	5,373	3,385	..	263,282	1,964,829
„ 1876	22,254	249,516	78,249	286,614	8,910	5,834	..	379,607	2,247,395
„ 1877 (53 weeks)	24,717	276,522	94,590	299,287	12,631	10,843	634	417,985	2,697,366
„ 1878	24,979	274,649	103,091	287,536	14,554	12,556	788	418,525	2,827,052
„ 1879	28,206	305,161	117,657	291,939	16,245	15,127	1,146	442,114	2,705,625
December, 1879 (50 weeks)	30,688	331,625	130,615	321,670	25,240	15,710	1,095	494,330	2,645,331
„ 1880	33,663	361,523	146,061	361,805	38,422	17,905	1,661	565,854	3,339,681
„ 1881	34,351	367,973	156,052	386,824	16,037	18,644	2,489	580,046	3,574,095
„ 1882	38,643	404,006	171,940	416,832	20,757	19,729	2,945	632,203	4,038,288
„ 1883	41,783	433,151	186,692	455,879	20,447	21,949	6,214	691,181	4,546,889
„ 1884 (53 weeks)	45,099	459,734	207,080	494,840	25,126	24,324	9,988	761,358	4,675,371
„ 1885	51,099	507,772	234,112	524,781	31,094	40,084	11,104	841,175	4,793,151
„ 1886	58,612	558,104	270,679	567,527	37,755	57,015	11,403	944,379	5,223,135
„ 1887	64,475	604,800	300,953	590,091	39,095	73,237	13,666	1,017,042	5,713,279
„ 1888	67,704	634,196	318,583	648,134	51,189	84,201	13,928	1,116,035	6,200,074
„ 1889 (53 weeks)	72,399	679,336	342,218	722,321	58,358	119,541	9,197	1,251,635	7,028,944
„ 1890	92,572	721,316	434,017	824,974	48,549	155,231	11,695	1,474,466	7,429,073
„ 1891	100,022	751,269	473,956	900,752	53,165	193,115	15,409	1,636,397	8,766,430
„ 1892	112,339	824,149	523,512	925,471	56,301	218,534	17,827	1,741,645	9,300,904
„ 1893	121,555	873,698	570,149	917,482	35,813	240,884	14,973	1,779,301	9,526,167
„ 1894	127,211	910,104	598,496	972,586	37,556	259,976	22,488	1,891,102	9,443,938
„ 1895 (53 weeks)	132,639	930,985	635,541	1,092,070	64,354	282,563	19,050	2,093,578	10,141,917
„ 1896	142,868	993,564	682,656	1,195,895	97,852	319,478	20,161	2,316,042	11,115,056
„ 1897	151,682	1,053,564	728,749	1,251,319	109,883	350,747	28,623	2,472,321	11,920,143
„ 1898	161,720	1,118,158	775,536	1,297,182	152,460	382,620	24,202	2,632,000	12,574,748
	..	..	..	..	..	..	..	..	160,264,712

Dr. RESERVE FUND ACCOUNT—TRADE DEPARTMENT

	£
Deductions from Reserve Fund—	
Celebration Dinner: Opening Warehouse, Balloon Street	56
Land and Buildings Account Depreciation, Special	1,148
Fixtures „ „	852
Newcastle Formation Expenses „ „	16
Insurance Fund	6,000
Investments Written off: Bank Department	18,259
„ „ Trade Department	10,660
Manchester Ship Canal Shares	20,000
Donations, Subscriptions, &c.	35,149
21st Anniversary Commemoration Expenses, Manchester	2,017
	94,157
Balance—Reserve Fund:—December 24th, 1898, as per Capital Account £105,395	
„ „ as per proposed Disposal of Profit Account. 7,700	113,095
	£207,252

MARCH, 1864, TO DECEMBER, 1898.

Comparison with corresponding period previous year.		Distributive Expenses.			Net Profit.	Average Dividend paid per £.	Additions to Trade.		Dates Departments and Branches were commenced.
Increase.	Rate.	Amount.	Rate on Sales				† Reserve Fund.	†† Insurance Fund.	
			Per £.	Per £100.					
£		£		s. d.	£	d.	£	£	
..	..	347	$1\frac{3}{4}$	13 $4\frac{1}{2}$	267	$1\frac{1}{2}$	..	..	
..	..	906	$1\frac{3}{4}$	15 0	1,858	$3\frac{1}{2}$	..	..	
54,735	$45\frac{1}{4}$	1,615	$2\frac{3}{8}$	18 $4\frac{3}{4}$	2,310	3	234	..	Tipperary.
112,688	$51\frac{5}{8}$	3,135	$2\frac{1}{2}$	18 $10\frac{3}{4}$	4,411	3	450	..	
124,063	43	3,338	$1\frac{5}{8}$	16 $2\frac{1}{4}$	4,862	$2\frac{3}{4}$	416	..	Kilmallock.
94,977	23	4,644	$2\frac{1}{4}$	18 $3\frac{5}{8}$	4,248	$1\frac{3}{4}$	542	..	Limerick.
159,379	$30\frac{3}{4}$	5,583	$1\frac{7}{8}$	16 $5\frac{3}{8}$	7,626	$2\frac{1}{4}$	1,620	..	
86,559	$12\frac{5}{8}$	6,853	$2\frac{3}{8}$	18 $0\frac{3}{4}$	7,867	$2\frac{1}{4}$	1,020	..	Newcastle.
394,368	$51\frac{5}{8}$	12,811	$2\frac{3}{8}$	22 $2\frac{3}{4}$	11,116	$2\frac{1}{4}$	1,243	..	Manchester Boot and Shoe, Crumpsall.
483,818	$41\frac{7}{8}$	21,147	3	25 10	14,233	2	922	..	Armagh, Manchester Drapery, Leicester, Hartford, Waterford, Clonmel.
327,879	20	28,436	$3\frac{3}{8}$	28 $11\frac{1}{2}$	20,684	2	4,461	..	London, Tralee, Durham.
282,566	$14\frac{3}{8}$	31,555	$3\frac{3}{8}$	28 $0\frac{3}{4}$	26,750	$2\frac{3}{8}$	4,826	..	Liverpool.
401,095	$17\frac{1}{2}$	42,436	$3\frac{3}{4}$	31 $5\frac{1}{2}$	36,979	$2\frac{3}{8}$	4,925	..	New York, Goole, Furnishing. S.S. "Plover" purchased. Cork.
188,897	$7\frac{1}{8}$	43,169	$3\frac{5}{8}$	30 $6\frac{3}{8}$	29,189	2	579	..	
121,427*	$4\frac{5}{8}$*	43,093	$3\frac{3}{4}$	31 $10\frac{1}{4}$	34,959	$2\frac{1}{8}$	5,970	..	
22,774	$0\frac{7}{8}$	41,309	$3\frac{3}{4}$	31 $2\frac{3}{4}$	42,764	$2\frac{3}{4}$	8,060	..	Launch of Steamship "Pioneer." Rouen. Goole forwarding depôt.
611,282	$22\frac{3}{8}$	47,153	$3\frac{3}{8}$	28 $2\frac{3}{4}$	42,090	$2\frac{3}{8}$	10,651	..	Heckmondwike.
234,414	7	51,306	$3\frac{3}{4}$	28 $8\frac{1}{4}$	46,850	$2\frac{3}{8}$	7,672	..	Copenhagen. Purchase of S.S. "Cambrian."
464,143	$12\frac{5}{8}$	57,340	$3\frac{3}{4}$	28 $4\frac{3}{4}$	49,658	$2\frac{3}{8}$	3,416	..	Tea and Coffee Department, London.
508,651	$12\frac{1}{2}$	66,057	$3\frac{3}{8}$	29 $0\frac{3}{8}$	47,885	$2\frac{3}{8}$	3,176	..	Purchase of S.S. "Unity."
41,042	$0\frac{5}{8}$	70,343	$3\frac{1}{4}$	30 1	54,491	$2\frac{3}{4}$	6,431	..	Hamburg. Bristol Depôt. Launch of S.S. "Progress."
203,946	$4\frac{3}{8}$	74,305	$3\frac{3}{8}$	31 0	77,630	$3\frac{3}{8}$	4,454	13,259	
430,028	$8\frac{5}{8}$	81,653	$3\frac{3}{4}$	31 $3\frac{3}{8}$	83,328	$3\frac{3}{8}$	7,077	15,469	Longton Depôt. Launch of S.S. "Federation."
490,056	$9\frac{3}{8}$	93,979	$3\frac{5}{8}$	32 $10\frac{1}{4}$	65,141	$2\frac{1}{2}$	9,408	2,778	Batley, Heckmondwike Currying.
486,839	$8\frac{1}{2}$	105,027	4	33 $10\frac{1}{2}$	82,490	$2\frac{5}{8}$	8,684	6,614	London Cocoa Department. Launch of S.S. "Equity." Batley Ready-mades.
709,638	$11\frac{5}{8}$	117,849	4	33 $6\frac{3}{4}$	101,984	$3\frac{1}{4}$	2,249	16,658	
532,750	$7\frac{3}{8}$	126,879	4	34 $1\frac{5}{8}$	126,979	$3\frac{1}{2}$	..	20,982	Launch of S.S. "Liberty." Leeds Ready-mades Department.
1,337,357	18	143,151	$3\frac{5}{8}$	32 $7\frac{5}{8}$	135,008	$3\frac{1}{2}$	1,145	14,702	Dunston, Aarhus, Leicester New Works.
534,471	6	165,737	$4\frac{1}{4}$	35 $7\frac{5}{8}$	98,532	$2\frac{1}{4}$	6,511	1,099	Broughton Cabinet Works.
225,263	$2\frac{3}{8}$	179,910	$4\frac{1}{2}$	37 $9\frac{1}{4}$	84,156	$2\frac{1}{2}$	‡17,215	7,659	
82,229	$0\frac{1}{8}$*	185,058	$4\frac{5}{8}$	39 $4\frac{1}{8}$	126,192	$2\frac{3}{4}$	26,052	..	Montreal.
516,365	$5\frac{1}{4}$	199,512	$4\frac{5}{8}$	39 $1\frac{5}{8}$	192,766	$3\frac{3}{4}$	27,424	10,000	Printing, Gothenburg, Irlam, Irish Creameries.
1,164,496	$13\frac{5}{8}$	218,393	$4\frac{5}{8}$	39 $3\frac{1}{4}$	177,419	$3\frac{1}{4}$	18,045	13,030	West Hartlepool, Middleton.
805,987	$7\frac{5}{8}$	246,477	$4\frac{5}{8}$	41 $1\frac{3}{4}$	135,561	$2\frac{1}{4}$	8,338	..	Sydney.
654,605	$5\frac{5}{8}$	255,032	$4\frac{3}{4}$	40 $6\frac{1}{4}$	231,256	$3\frac{1}{2}$	31,618	5,030	Littleboro'. Manchester Tobacco Factory.
..	..	2,776,538	$4\frac{1}{8}$	34 $7\frac{3}{8}$	2,209,589	$2\frac{5}{8}$	‡200,444	‡124,121	

* Decrease. † From. ‡ From Disposal of Profit Account.

FROM COMMENCEMENT OF SOCIETY. Cr.

	£
Additions to Reserve Fund—	
From Disposal of Profit Account, as above—Net	200,444
Bonus to Employés: Balances between Amounts Provided and actually Paid	311
Dividend on Bad Debts, previously written off	746
Unclaimed Balances, Shares, Loans, &c.	162
Profit on Sale of Strawberry Estate, Newcastle	1,953
" " Land, Liverpool	713
" " Land and Buildings, Rosedale	11
" " " " South Shields	96
" " " " Newhall	418
" " " Shares—New Telephone Company	44
" " Balance of Share Investments—Lancashire and Yorkshire Productive Society	60
Balance—Sale of Durham Property	376
Interest on Manchester Ship Canal Shares	1,515
Dividend on Sales to Employés	403
	£207,252

MANCHESTER GROCERY AND PROVISION TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Stocks at end.
		Amount.	Rate.	Amount.	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£
January, 1875 (3 quarters) ..	1110155	11716	0 2½	11986	0 2½	71360
„ 1876	1476536	14701	0 2⅝	19042	0 3	56487
„ 1877 (53 weeks)	1707637	17692	0 2⅝	27993	0 3⅞	68205
„ 1878	1761017	16866	0 2½	25745	0 3½	53790
„ 1879	1683613	17373	0 2⅝	26502	0 3¾	55319
December, 1879 (50 weeks)	1590007	16761	0 2½	28826	0 4½	71446
„ 1880	1998384	18911	0 2¼	30977	0 3⅝	70091
„ 1881	2047210	19883	0 2¼	32460	0 3¾	87277
„ 1882	2298350	23666	0 2⅝	30644	0 3⅛	141191
„ 1883	2544409	28337	0 2⅝	27455	0 2⅝	109414
„ 1884 (53 weeks)	2457288	28522	0 2⅝	24893	0 2⅝	107524
„ 1885	2375945	27484	0 2⅝	41757	0 4⅛	92790
„ 1886	2571435	29777	0 2⅝	41381	0 3⅝	113620
„ 1887	2827624	32979	0 2¾	45516	0 3¾	129565
„ 1888	3092225	35914	0 2¾	49798	0 3⅞	139849
„ 1889 (53 weeks)	3503195	39805	0 2⅝	61452	0 4⅛	112395
„ 1890	3517114	41548	0 2⅝	65984	0 4⅞	123432
„ 1891	4112569	46620	0 2⅝	74882	0 4¼	192161
„ 1892	4401000	55140	0 3	59915	0 3¼	226266
„ 1893	4546048	57881	0 3	48016	0 2⅛	135325
„ 1894	4946127	57985	0 3⅛	62920	0 3⅜	144705
Quarter ended:—						
March, 1895	1026850	14600	0 3⅜	25547	0 5⅞	119255
June, „	1023423	14895	0 3⅜	20763	0 4⅜	118877
September, „ (14 weeks)....	1237877	16234	0 3⅜	21308	0 4⅛	179163
December, „	1262567	15907	0 3	26465	0 5	159930
March, 1896	1164938	15884	0 3½	24751	0 5	141996
June, „	1114976	15834	0 3⅜	13396	0 2⅞	133875
September, „	1252679	16291	0 3	21289	0 4	157209
December, „	1341234	17948	0 3⅛	25624	0 4½	155114
March, 1897	1198438	17389	0 3⅜	19980	0 4	139622
June, „	1185593	17121	0 3⅜	16737	0 3⅜	120380
September, „	1297996	17458	0 3⅜	20114	0 3⅝	164960
December, „	1403175	18399	0 3⅝	20914	0 3½	124776
March, 1898	1243261	17545	0 3⅜	25403	0 4⅞	103462
June, „	1234364	17383	0 3⅜	26085	0 5	104364
September, „	1318412	18044	0 3½	23391	0 4½	180221
December, „	1552207	18654	0 2⅝	30665	0 4⅜	137460
Half Year ended:—						
June, 1899	2765877	38790	0 3½	52620	0 4½	96821
	78591755	947937	0 2⅞	1253196	0 3¾	..

MANCHESTER DRAPERY TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Net Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1874 (1 quarter)	10575	348	0 8	201	0 $4\frac{2}{10}$	..	..	11568
„ 1875	71290	3872	1 1	1244	0 $4\frac{3}{8}$	..	..	36824
„ 1876	129486	7264	1 $1\frac{1}{2}$	720	0 $1\frac{1}{2}$	..	..	72408
„ 1877 (53 weeks)	147083	9391	1 $3\frac{3}{8}$	..	..	1420	0 $2\frac{1}{4}$	69267
„ 1878	124918	8879	1 $5\frac{1}{4}$	..	..	4144	0 $7\frac{7}{8}$	48511
„ 1879	134746	8518	1 $3\frac{1}{8}$	635	0 $1\frac{1}{8}$	..	..	44439
December, 1879 (50 weeks)	126824	7817	1 $2\frac{3}{4}$	1674	0 $3\frac{1}{8}$	..	..	43225
„ 1880	139421	8511	1 $2\frac{5}{8}$	2314	0 4	..	..	44105
„ 1881	132914	8168	1 $2\frac{3}{4}$	1932	0 $3\frac{1}{4}$	..	..	42203
„ 1882	143019	8337	1 $1\frac{7}{8}$	3504	0 $5\frac{7}{8}$	..	..	40854
„ 1883	156997	8976	1 $1\frac{5}{8}$	4171	0 $6\frac{3}{8}$	..	..	41365
„ 1884 (53 weeks)	165770	8365	1 0	5283	0 $7\frac{5}{8}$	..	..	38026
„ 1885	173293	9067	1 $0\frac{1}{4}$	5387	0 $7\frac{3}{8}$	..	..	44948
„ 1886	195139	9728	0 $11\frac{7}{8}$	5393	0 $6\frac{1}{2}$	..	..	54130
„ 1887	210705	10798	1 $0\frac{1}{2}$	3624	0 $4\frac{1}{2}$	..	..	59695
„ 1888	232277	11350	0 $11\frac{5}{8}$	4791	0 $4\frac{7}{8}$	..	..	62110
„ 1889 (53 weeks)	256449	13168	1 $0\frac{1}{8}$	4539	0 $4\frac{1}{2}$	..	..	87849
„ 1890	311365	15612	1 0	6991	0 $5\frac{3}{8}$	..	..	84739
„ 1091	339213	16306	0 $11\frac{1}{4}$	7915	0 $5\frac{1}{2}$	..	..	82524
„ 1892	370495	18867	1 $0\frac{1}{8}$	10136	0 $6\frac{1}{2}$	..	..	90744
„ 1893	369766	19899	1 $0\frac{5}{8}$	7785	0 5	..	..	98217
„ 1894	400813	21697	1 $5\frac{1}{4}$	10031	0 8	..	..	97297
Quarter ended:—								
March, 1895	103266	5485	1 $0\frac{5}{8}$	2889	0 $6\frac{5}{8}$	..	..	94987
June, „	105908	5745	1 1	4005	0 9	..	..	94074
September, „ (14 weeks)	108096	6327	1 2	193	0 $0\frac{3}{8}$	..	..	104180
December, „	122890	6060	0 $11\frac{3}{4}$	5269	0 $10\frac{1}{4}$	..	..	108337
March, 1896	120344	6254	1 $0\frac{3}{8}$	2922	0 $5\frac{2}{8}$	..	..	106224
June, „	114333	6658	1 $1\frac{7}{8}$	3221	0 $6\frac{3}{4}$	..	..	105972
September, „	114877	6284	1 $1\frac{3}{8}$	3509	0 $7\frac{1}{4}$	..	..	114650
December, „	132890	6641	0 $11\frac{5}{8}$	3974	0 $7\frac{3}{8}$	..	..	111911
March, 1897	124187	6617	1 $0\frac{3}{4}$	2865	0 $5\frac{1}{2}$	..	..	110875
June, „	115969	6754	1 $1\frac{7}{8}$	3351	0 $6\frac{7}{8}$	..	..	112710
September, „	115652	6888	1 $2\frac{1}{4}$	2883	0 $5\frac{3}{8}$	..	..	123631
December, „	128432	7035	1 $1\frac{1}{8}$	3966	0 $7\frac{3}{8}$	..	..	113899
March, 1898	117725	6890	1 2	4160	0 $8\frac{3}{8}$	..	..	114161
June, „	117286	6820	1 $1\frac{7}{8}$	4678	0 $9\frac{1}{2}$	..	..	115119
September, „	109057	6654	1 $2\frac{3}{8}$	2384	0 $5\frac{1}{8}$	..	..	123990
December, „	137068	6959	1 $0\frac{3}{8}$	5228	0 $9\frac{1}{8}$	..	..	119399
Half Year ended:—								
June, 1899	263558	14454	1 $1\frac{3}{8}$	11169	0 $10\frac{1}{8}$	..	..	126661
	6494036	353463	1 1	154876	..	5564	..	..
Less Depreciation allowed, see Disposal of Profit Account, October, 1877		£4757		..	..			
„ Loss		5564		10321	..			
Leaves Net Profit		..		144555	0 $5\frac{1}{2}$			

Note.—To December, 1883, the figures include Woollens and Ready-Mades Department.

MANCHESTER WOOLLENS AND READY-MADES TRADE.

Since publishing a separate Account in Balance Sheet.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Net Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
December, 1884 (53 weeks)	20368	1221	1 $2\frac{3}{8}$	409	0 $4\frac{3}{8}$	..	..	4407
„ 1885	21210	1249	1 $2\frac{5}{8}$	336	0 $3\frac{3}{4}$	..	..	5242
„ 1886	22173	1417	1 $3\frac{1}{2}$	327	0 $3\frac{1}{2}$	..	..	6275
„ 1887	21820	1427	1 $3\frac{5}{8}$	..	..	2	..	6112
„ 1888	23047	1547	1 4	..	..	25	0 $0\frac{1}{2}$	8450
„ 1889 (53 weeks)	26813	1845	1 $4\frac{1}{2}$	..	..	212	0 $1\frac{5}{8}$	12277
„ 1890	26693	2095	1 $6\frac{3}{4}$	..	..	1284	0 $11\frac{3}{8}$	11463
„ 1891	31946	2465	1 $6\frac{7}{8}$	..	..	2294	1 $5\frac{5}{8}$	19761
„ 1892	40649	2949	1 $5\frac{3}{8}$	..	..	4193	2 $0\frac{5}{8}$	12958
„ 1893	49519	2967	1 $2\frac{3}{8}$	482	0 $2\frac{1}{4}$	..	..	13166
„ 1894	57628	3369	1 2	691	0 $2\frac{7}{8}$	..	..	13655
Quarter ended:—								
March, 1895	17034	970	1 $1\frac{5}{8}$	210	0 $2\frac{7}{8}$	..	..	15189
June, „	23802	1035	0 $10\frac{3}{4}$	954	0 $9\frac{1}{2}$	..	..	11622
September, „ (14 weeks)	15600	1028	1 $3\frac{3}{4}$	88	0 $1\frac{1}{4}$	..	..	16168
December, „	19137	1122	1 2	830	0 $10\frac{3}{8}$	..	..	15608
March, 1896	24664	1218	0 $11\frac{3}{4}$	323	0 $3\frac{1}{8}$	..	..	18666
June, „	29459	1201	0 $9\frac{3}{4}$	1298	0 $10\frac{1}{2}$	..	..	14936
September, „	20756	1302	1 3	718	0 $8\frac{1}{4}$	..	..	18457
December, „	25714	1340	1 $0\frac{1}{2}$	320	0 $2\frac{7}{8}$	..	..	18479
March, 1897	29392	1642	1 $1\frac{3}{8}$	147	0 $1\frac{1}{2}$	..	..	26105
June, „	40602	1600	0 $9\frac{5}{8}$	1499	0 $8\frac{3}{4}$	..	..	17882
September, „	21194	1594	1 6	718	0 $8\frac{1}{8}$	..	..	25473
December, „	22014	1546	1 $4\frac{3}{4}$	..	..	267	0 $2\frac{7}{8}$	24444
March, 1898	28820	1737	1 $2\frac{5}{8}$	..	..	193	0 $1\frac{1}{2}$	27652
June, „	38378	1844	0 $11\frac{1}{2}$	2563	1 4	..	..	21993
September, „	20875	1600	1 $6\frac{3}{8}$	333	0 $3\frac{3}{4}$	..	..	25846
December, „	26048	1657	1 $3\frac{1}{4}$	404	0 $3\frac{5}{8}$	..	..	25184
Half Year ended:—								
June, 1899	77562	3911	1 0	1437	0 $4\frac{3}{8}$	..	..	21341
	822917	48898	1 $2\frac{1}{4}$	14087	..	8470	..	..
Less Loss				8470	..			
Leaves Net Profit				5617	0 $1\frac{5}{8}$			

Note.—To June, 1895, inclusive, the figures include Broughton Clothing Factory, now separately stated in Productive Accounts.

MANCHESTER BOOT AND SHOE TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Net Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1874 (1 quarter)	5506	204	0 $8\frac{3}{4}$	1	..	..	..	4715
„ 1875	37257	1129	0 $7\frac{1}{2}$	748	0 $4\frac{3}{4}$	..	..	5197
„ 1876	53885	1326	0 $5\frac{7}{8}$	775	0 $3\frac{3}{8}$	..	..	7711
„ 1877 (53 weeks)	57307	1811	0 $7\frac{1}{2}$	586	0 $2\frac{3}{8}$	..	..	6082
„ 1878	58304	1975	0 $8\frac{1}{8}$	786	0 $3\frac{1}{8}$	..	..	7935
„ 1879	59327	2192	0 $8\frac{1}{4}$	767	0 3	..	..	10242
December, 1879 (50 weeks)	55270	2135	0 $9\frac{1}{4}$	752	0 $3\frac{1}{4}$	..	..	10964
„ 1880	62139	2387	0 $9\frac{5}{8}$	755	0 $2\frac{5}{8}$	..	..	11484
„ 1881	71382	2492	0 $8\frac{3}{8}$	842	0 $2\frac{3}{4}$	..	..	11377
„ 1882	76101	2583	0 $8\frac{1}{8}$	1246	0 $3\frac{7}{8}$	..	..	12564
„ 1883	86056	2882	0 8	1261	0 $3\frac{1}{2}$	..	..	12938
„ 1884 (53 weeks)	99694	3150	0 $7\frac{1}{2}$	1586	0 $3\frac{3}{4}$	..	..	16567
„ 1885	106755	3596	0 8	1395	0 $3\frac{1}{4}$	..	..	16074
„ 1886	121432	3772	0 $7\frac{3}{8}$	2767	0 $5\frac{5}{8}$	..	..	16578
„ 1887	126099	4070	0 $7\frac{5}{8}$	3083	0 $5\frac{5}{8}$	..	..	19727
„ 1888	139188	4864	0 $8\frac{3}{4}$	2940	0 5	..	..	22680
„ 1889 (53 weeks)	163002	5491	0 8	3772	0 $5\frac{1}{2}$	..	..	24067
„ 1890	188530	5983	0 $7\frac{1}{2}$	4957	0 $6\frac{1}{2}$	..	..	32095
„ 1891	218180	7194	0 $7\frac{7}{8}$	4958	0 $5\frac{3}{8}$	..	..	36875
„ 1892	233097	9322	0 $9\frac{1}{2}$	3044	0 $3\frac{5}{8}$	..	..	52169
„ 1893	222497	9919	0 $10\frac{5}{8}$	2817	0 3	..	..	50864
„ 1894	232561	10659	0 $10\frac{5}{8}$	2476	0 $2\frac{1}{2}$	..	..	56515
Quarter ended:—								
March, 1895	64234	2733	0 $10\frac{1}{8}$	835	0 3	..	..	58151
June, „	81333	2843	0 $8\frac{3}{8}$	1791	0 $5\frac{1}{4}$	..	..	52650
September, „ (14 weeks)	60915	2788	0 $10\frac{5}{8}$	1239	0 $4\frac{5}{8}$	..	..	55506
December, „	62484	2573	0 $9\frac{5}{8}$	1797	0 $6\frac{5}{8}$	..	..	56302
March, 1896	73216	2854	0 $9\frac{1}{4}$	2176	0 $7\frac{1}{4}$	..	..	66193
June, „	83108	2927	0 $8\frac{3}{8}$	2910	0 $8\frac{3}{8}$	..	..	59946
September, „	57289	2672	0 $11\frac{5}{8}$	..	..	327	0 $1\frac{1}{4}$	59734
December, „	68276	2754	0 $9\frac{5}{8}$	1233	0 $4\frac{1}{4}$	..	..	52161
March, 1897	70688	2961	0 10	1179	0 4	..	..	61443
June, „	86649	3008	0 $8\frac{1}{4}$	2079	0 $5\frac{3}{4}$	..	..	55454
September, „	59396	2853	0 $11\frac{1}{2}$	918	0 $3\frac{5}{8}$	..	..	61682
December, „	62837	3008	0 $11\frac{5}{8}$	586	0 $2\frac{1}{8}$	..	..	59341
March, 1898	66228	2895	0 $10\frac{5}{8}$	1262	0 $4\frac{1}{2}$	..	..	71967
June, „	83604	3134	0 $8\frac{5}{8}$	2131	0 6	..	..	62341
September, „	57706	2862	0 $11\frac{5}{8}$	635	0 $2\frac{5}{8}$	..	..	56516
December, „	67827	2790	0 $9\frac{3}{4}$	1367	0 $4\frac{1}{4}$	..	..	52332
Half Year ended:								
June, 1899	169368	6044	0 $8\frac{1}{2}$	3483	0 $4\frac{7}{8}$	..	..	50466
	3748727	140835	0 9	67935	..	327	..	..
Less Loss				327	..			
Leaves Net Profit				67608	0 $4\frac{1}{4}$			

MANCHESTER FURNISHING TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Net Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1877 (27 weeks)	5944	405	1 4⅜	..	..	52	0 2	2571
„ 1878	15464	984	1 3¼	65	0 1	..	..	2286
„ 1879	17374	1185	1 4½	140	0 1⅞	..	..	2421
December, 1879 (50 weeks)	18361	1108	1 2⅜	60	0 0¾	..	..	3524
„ 1880	24243	1317	1 1	404	0 4	..	..	4307
„ 1881	24844	1293	1 0½	171	0 1⅝	..	..	3971
„ 1882	29021	1515	1 0⅜	219	0 1⅞	..	..	3630
„ 1883	34804	1878	1 0⅝	423	0 2⅞	..	..	4274
„ 1884 (53 weeks)	44311	2253	1 0	673	0 3¾	..	..	5433
„ 1885	51238	2415	0 11¼	893	0 4½	..	..	5817
„ 1886	62340	2657	0 10⅜	1129	0 4¼	..	..	6041
„ 1887	72932	3497	0 11¾	946	0 3	..	..	9497
„ 1888	85484	4755	1 1⅜	546	0 1½	..	..	8548
„ 1889 (53 weeks)	96163	4952	1 0⅜	1436	0 3¾	..	..	9770
„ 1890	122661	5389	0 10½	2351	0 4½	..	..	12930
„ 1891	137106	5993	0 10⅝	2048	0 3½	..	..	12567
„ 1892	142986	7559	1 0⅝	319	0 0¾	..	..	13455
„ 1893	142528	7993	1 1⅜	344	0 0¾	..	..	17683
„ 1894	167721	9225	1 1⅝	1421	0 2	..	..	21775
Quarter ended:—								
March, 1895	40945	2471	1 2⅜	..	..	95	0 0½	23380
June, „	47758	2529	1 0⅝	468	0 2¼	..	..	23109
September, „ (14 weeks)	46622	2671	1 1⅜	723	0 3⅜	..	..	16664
December, „	56137	2689	0 11⅜	1359	0 5¾	..	..	19574
March, 1896	51743	2688	1 0⅜	802	0 3⅝	..	..	19369
June, „	56949	2742	0 11½	1218	0 5⅜	..	..	19985
September, „	52401	2757	1 0⅝	557	0 2½	..	..	19893
December, „	67039	2974	0 10⅝	1667	0 5⅞	..	..	19972
March, 1897	57997	3078	1 0⅝	347	0 1⅜	..	..	20942
June, „	65822	3141	0 11⅝	1347	0 4⅝	..	..	22492
September, „	55214	3071	1 1¼	313	0 1¼	..	..	22962
December, „	66803	3277	0 11¾	861	0 3	..	..	22500
March, 1898	56369	3173	1 1⅞	268	0 1⅛	..	..	22311
June, „	64874	3253	1 0⅝	991	0 3⅝	..	..	23254
September, „	54729	3185	1 1⅝	654	0 2⅜	..	..	22194
December, „	76460	3368	0 10½	2453	0 7⅞	..	..	22323
Half Year ended:—								
June, 1899	133553	6595	0 11¾	2578	0 4⅝	..	..	21489
	2346440	120035	1 0¼	30194	..	147	..	..
Less Loss				147	..			
Leaves Net Profit				30047	0 3			

Note.—From March quarter, 1893, to June quarter, 1895, inclusive, the results and Stocks include Broughton Cabinet Works.

NEWCASTLE BRANCH GROCERY AND PROVISION TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Net Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1877 (53 weeks)	529244	7727	0 3 1/4	4531	0 2	..	..	34591
„ 1878	541783	8213	0 3 3/8	4139	0 1 3/8	..	..	28996
„ 1879	457597	7402	0 3 5/8	3168	0 1 3/8	..	..	22789
December, 1879 (50 weeks)	465108	6823	0 3 1/4	7234	0 3 5/8	..	..	49145
„ 1880	588664	7868	0 3 1/4	4686	0 1 5/8	..	..	44398
„ 1881	703937	8921	0 3	9296	0 3 1/8	..	..	54648
„ 1882	795007	10098	0 3	8741	0 2 5/8	..	..	65330
„ 1883	871597	10785	0 2 7/8	10476	0 2 7/8	..	..	55152
„ 1884 (53 weeks)	930803	11395	0 2 7/8	12451	0 3 3/8	..	..	65158
„ 1885	936542	12075	0 3	14422	0 3 5/8	..	..	53546
„ 1886	949878	12321	0 3	18794	0 4 5/8	..	..	71265
„ 1887	966148	14220	0 3 1/2	11026	0 2 3/8	..	..	59632
„ 1888	1027528	14125	0 3 1/4	19143	0 4 3/8	..	..	65888
„ 1889 (53 weeks)	1100451	14947	0 3 1/4	18421	0 4	..	..	55671
„ 1890	1173876	15147	0 3	26496	0 5 3/8	..	..	42136
„ 1891	1431849	16944	0 2 3/4	31480	0 5 1/4	..	..	54737
„ 1892	1564121	18986	0 2 5/8	37070	0 5 5/8	..	..	60431
„ 1893	1589354	22345	0 3 1/4	29399	0 4 1/4	..	..	57932
„ 1894	1521138	22288	0 3 1/2	24831	0 3 5/8	..	..	48910
Quarter ended:—								
March, 1895	366270	5609	0 3 5/8	6899	0 4 1/2	..	..	45779
June, „	396302	5813	0 3 1/2	7440	0 4 1/2	..	..	42263
September, „ (14 weeks)	438437	6161	0 3 1/4	8730	0 4 1/2	..	..	57142
December, „	454002	5995	0 3 1/8	9262	0 4 3/8	..	..	46719
March, 1896	418791	6141	0 3 1/4	10067	0 5 3/8	..	..	55506
June, „	418527	6032	0 3 3/8	6555	0 3 3/4	..	..	47185
September, „	439780	7166	0 3 5/8	7725	0 4 3/8	..	..	52782
December, „	504031	7507	0 3 1/2	10139	0 4 3/4	..	..	66589
March, 1897	444427	7933	0 4 1/4	7257	0 3 7/8	..	..	53964
June, „	447756	7743	0 4 1/8	7022	0 3 3/4	..	..	54705
September, „	489459	7807	0 3 3/4	7468	0 3 3/8	..	..	65692
December, „	548141	8654	0 3 3/4	7745	0 3 3/8	..	..	59741
March, 1898	496422	8634	0 4 1/8	9120	0 4 3/8	..	..	56836
June, „	489795	8095	0 3 7/8	7367	0 3 1/2	..	..	50456
September, „	505604	8198	0 3 5/8	7671	0 3 3/8	..	..	72981
December, „	616613	8682	0 3 3/8	15936	0 6 1/8	..	..	69515
Half Year ended:—								
June, 1899	1068590	17709	0 3 7/8	17470	0 3 7/8	..	..	87607
	26686972	376509	0 3 3/8	450227	0 4	..	..	..

NEWCASTLE BRANCH DRAPERY AND WOOLLENS TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Stocks at end.
		Amount.	Rate.	Amount.	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£
January 1877 (53 weeks) ..	39896	1728	0 10$\frac{3}{8}$	796	0 4$\frac{3}{8}$	11525
„ 1878	49559	2211	0 10$\frac{5}{8}$	999	0 4$\frac{7}{8}$	11635
„ 1879	44161	2159	0 11$\frac{5}{8}$	612	0 3$\frac{1}{4}$	10463
December, 1879 (50 weeks) ..	44674	2153	0 11$\frac{1}{2}$	871	0 4$\frac{5}{8}$	11590
„ 1880	55979	2494	0 10$\frac{5}{8}$	2206	0 9$\frac{1}{2}$	16171
„ 1881	69081	2656	0 9$\frac{1}{4}$	2339	0 8$\frac{1}{8}$	16075
„ 1882	84457	2975	0 8$\frac{3}{8}$	3656	0 10$\frac{3}{8}$	15754
„ 1883	99354	3387	0 8$\frac{1}{8}$	4499	0 10$\frac{3}{8}$	16594
„ 1884 (53 weeks) ..	118345	3983	0 8	4503	0 9$\frac{1}{8}$	18906
„ 1885	142701	4598	0 7$\frac{5}{8}$	6906	0 11$\frac{1}{2}$	24084
„ 1886	152433	5342	0 8$\frac{3}{8}$	7562	0 11$\frac{7}{8}$	28645
„ 1887	144713	5868	0 9$\frac{5}{8}$	5845	0 9$\frac{1}{8}$	25537
„ 1888	161974	5973	0 8$\frac{1}{4}$	6373	0 9$\frac{1}{8}$	30177
„ 1889 (53 weeks) ..	185443	6515	0 8$\frac{3}{8}$	7600	0 9$\frac{3}{8}$	32799
„ 1890	232360	6850	0 7	10588	0 10$\frac{7}{8}$	33216
„ 1891	251466	7500	0 7$\frac{1}{8}$	10886	0 10$\frac{3}{8}$	35964
„ 1892	241003	7796	0 7$\frac{3}{8}$	9731	0 9$\frac{3}{8}$	36570
„ 1893	259957	9573	0 8$\frac{7}{8}$	9829	0 9	40770
„ 1894	293930	9730	0 7$\frac{5}{8}$	12641	0 10$\frac{1}{4}$	40826
Quarter ended:—						
March, 1895	67954	2471	0 8$\frac{5}{8}$	2473	0 8$\frac{5}{8}$	45238
June, „	83208	2527	0 7$\frac{1}{4}$	4360	1 0$\frac{1}{2}$	36154
September, „ (14 weeks)	70999	2550	0 8$\frac{3}{8}$	3184	0 10$\frac{3}{4}$	43772
December, „	83287	2537	0 7$\frac{1}{4}$	4152	0 11$\frac{7}{8}$	48361
March, 1896	78185	2715	0 8$\frac{1}{4}$	2822	0 8$\frac{5}{8}$	54261
June, „	88553	2639	0 7$\frac{1}{8}$	4681	1 0$\frac{5}{8}$	45377
September, „	76473	2708	0 8$\frac{3}{8}$	3003	0 9$\frac{3}{8}$	54731
December, „	94463	2897	0 7$\frac{1}{4}$	3402	0 8$\frac{5}{8}$	53110
March, 1897	90788	3264	0 8$\frac{5}{8}$	4051	0 10$\frac{5}{8}$	58550
June, „	107270	3500	0 7$\frac{3}{4}$	6289	1 2	56074
September, „	82900	3447	0 9$\frac{5}{8}$	2809	0 8$\frac{3}{8}$	66367
December, „	95796	3613	0 9	4525	0 11$\frac{1}{4}$	63508
March, 1898	93121	3749	0 9$\frac{5}{8}$	4060	0 10$\frac{3}{8}$	66320
June, „	105979	3616	0 8$\frac{1}{4}$	6023	1 1$\frac{5}{8}$	57089
September, „	87551	3465	0 9$\frac{3}{8}$	3710	0 10$\frac{1}{8}$	65568
December, „	117224	3685	0 7$\frac{1}{2}$	6385	1 1	63296
Half Year ended:—						
June, 1899	244169	8208	0 8	13006	1 0$\frac{3}{4}$	66783
	4339406	151082	0 8$\frac{1}{2}$	187377	0 10$\frac{1}{2}$	..

NEWCASTLE BRANCH BOOT AND SHOE TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1877 (53 weeks)	25379	649	0 6 1/8	406	0 3 3/4	..	..	1505
„ 1878	28425	760	0 6 3/8	690	0 5 3/4	..	..	2242
„ 1879	28375	880	0 7 3/8	310	0 2 3/8	..	..	3179
December, 1879 (50 weeks)	27708	935	0 8	357	0 3	..	..	4681
„ 1880	34968	1276	0 8 3/4	649	0 4 3/4	..	..	5971
„ 1881	42991	1307	0 7 1/4	938	0 5 1/4	..	..	4645
„ 1882	54487	1527	0 6 5/8	1336	0 5 1/4	..	..	6561
„ 1883	65501	1955	0 7 1/8	1890	0 6 3/4	..	..	5817
„ 1884 (53 weeks)	75054	2408	0 7 3/8	1917	0 6 1/8	..	..	8266
„ 1885	89117	2783	0 7 3/8	2195	0 5 3/8	..	..	11319
„ 1886	97148	3646	0 9	1619	0 4	..	..	13442
„ 1887	91029	3929	0 10 1/4	1173	0 3	..	..	13974
„ 1888	101272	3978	0 9 3/4	1547	0 3 3/4	..	..	14483
„ 1889 (53 weeks)	90528	3570	0 9 3/4	1236	0 3 1/4	..	..	12463
„ 1890	113149	3753	0 7 1/4	2299	0 4 3/8	..	..	11870
„ 1891	124707	3871	0 7 3/8	3127	0 6	..	..	12628
„ 1892	125484	4064	0 7 3/4	2631	0 5	..	..	15567
„ 1893	127479	4893	0 9 1/2	2156	0 4	..	..	18139
„ 1894	131414	4701	0 8 1/2	2245	0 4	..	..	17770
Quarter ended:—								
March, 1895	29370	1172	0 9 1/8	290	0 2 1/4	..	..	19041
June, „	39716	1271	0 7 5/8	860	0 5 3/8	..	..	18604
September, „ (14 weeks)	33923	1212	0 8 1/4	1345	0 9 1/4	..	..	22122
December, „	36744	1259	0 8 3/8	1366	0 8 7/8	..	..	20680
March, 1896	34451	1229	0 8 1/2	673	0 4 5/8	..	..	21558
June, „	36535	1165	0 7 5/8	959	0 6 1/4	..	..	21758
September, „	34988	1217	0 8 1/4	993	0 6 1/2	..	..	19973
December, „	40421	1215	0 7 1/8	1324	0 7 3/4	..	..	20059
March, 1897	36972	1294	0 8 3/8	517	0 3 1/4	..	..	23739
June, „	41839	1487	0 8 7/8	966	0 5 1/2	..	..	21099
September, „	35197	1432	0 9 3/4	630	0 4 1/4	..	..	22539
December, „	37266	1525	0 9 1/2	648	0 4 3/8	..	..	20171
March, 1898	36905	1481	0 9 3/8	321	0 2	..	..	20848
June, „	43474	1526	0 8 3/4	823	0 4 3/8	..	..	22449
September, „	38714	1481	0 9 1/8	936	0 5 3/4	..	..	21950
December, „	45669	1534	0 8	1336	0 7	..	..	20131
Half Year ended:—								
June, 1899	103061	3185	0 7 3/8	2586	0 6	..	..	21045
	2179460	75570	0 8 1/4	45294	0 4 7/8	..	..	..

Note.—To December, 1888, the figures include Furnishing Department.

NEWCASTLE BRANCH FURNISHING TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Net Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
December, 1889 (53 weeks)	49078	2736	1 1⅝	..	..	112	0 0½	6636
„ 1890	89409	3551	0 9½	2499	0 6⅝	..	..	10474
„ 1891	99241	4220	0 10⅞	2178	0 5¼	..	..	12002
„ 1892	81965	4187	1 0½	1224	0 3½	..	..	11833
„ 1893	86923	5667	1 3⅜	155	0 0⅜	..	..	13261
„ 1894	106345	6106	1 1¼	1605	0 3½	..	..	13377
Quarter ended:—								
March, 1895	21003	1511	1 5½	..	..	301	0 3⅜	14896
June, „	30574	1682	1 1½	616	0 4⅜	..	..	14474
September, „ (14 weeks)	27566	1663	1 2⅜	370	0 3⅛	..	..	14956
December, „	32290	1671	1 0⅜	386	0 2¾	..	..	16120
March, 1896	27152	1731	1 3¼	491	0 4½	..	..	17407
June, „	33866	1735	1 0½	943	0 6⅜	..	..	17884
September, „	31807	1808	1 1⅜	9	..	..	..	17877
December, „	38021	1795	0 11¼	906	0 5⅜	..	..	18974
March, 1897	33046	1762	1 0⅜	881	0 6⅜	..	..	19905
June, „	40127	1956	0 11⅜	853	0 5	..	..	20409
September, „	35102	2011	1 1⅜	24	0 0⅛	..	..	21964
December, „	41451	2257	1 1	1007	0 5¾	..	..	20746
March, 1898	33750	2207	1 3⅜	330	0 2⅛	..	..	21571
June, „	41259	2261	1 1½	1186	0 6⅛	..	..	22370
September, „	40755	2320	1 1⅝	923	0 5⅜	..	..	22438
December, „	54646	2422	0 10⅜	1635	0 7⅜	..	..	22455
Half year ended:—								
June, 1899	112242	5143	0 10⅞	2745	0 5¾	..	..	23531
	1187618	62402	1 0½	20966	..	413	..	..
		Less Loss		413	..			
		Leaves Net Profit		20553	0 4⅛			

LONDON BRANCH GROCERY TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Stocks at end.
		Amount.	Rate.	Amount.	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£
January, 1875 (3 quarters) ..	72385	1542	0 5 1/8	567	0 1 7/8	7315
„ 1876	130752	2365	0 4 3/8	1584	0 2 5/8	7219
„ 1877 (53 weeks) ..	184879	3026	0 3 7/8	4182	0 5 3/8	12668
„ 1878	210415	3283	0 3 3/4	2320	0 2 5/8	10511
„ 1879	216314	3381	0 3 3/4	2388	0 2 5/8	8489
December, 1879 (50 weeks) ..	232660	3570	0 3 5/8	5239	0 5 3/8	13594
„ 1880	274965	4066	0 3 7/8	3559	0 3 1/8	20789
„ 1881	289748	5310	0 4 3/8	2149	0 1 3/4	7394
„ 1882	296767	5001	0 4	3776	0 3	10636
„ 1883	337753	5441	0 3 7/8	4630	0 3 1/4	13282
„ 1884 (53 weeks) ..	375963	6233	0 4	5062	0 3 1/4	18869
„ 1885	445876	7485	0 4	9101	0 4 7/8	24256
„ 1886	527904	8463	0 3 3/4	9719	0 4 3/8	24739
„ 1887	652882	11336	0 4 1/8	8839	0 3 1/4	47319
„ 1888	739279	14028	0 4 3/4	9377	0 3	41562
„ 1889 (53 weeks) ..	848378	15176	0 4 1/4	10667	0 3	44017
„ 1890	893470	17020	0 4 1/4	12668	0 3 3/8	57347
„ 1891	1122798	20910	0 4 3/8	11438	0 2 3/8	75578
„ 1892	1206449	23790	0 4 5/8	13533	0 2 5/8	73398
„ 1893	1227494	25155	0 4 5/8	11568	0 2 1/4	64854
„ 1894	1236372	26626	0 5 1/8	15589	0 3	54454
Quarter ended:—						
March, 1895	287697	6917	0 5 3/4	5258	0 4 3/8	40798
June, „	305080	6790	0 5 1/4	5096	0 4	35098
September, „ (14 weeks)	356941	7296	0 4 5/8	5008	0 3 1/4	53564
December, „	382327	7587	0 4 3/4	7077	0 4 3/8	45828
March, 1896	337266	7395	0 5 1/4	7052	0 5	43993
June, „	341050	7579	0 5 1/2	3617	0 2 1/4	37480
September, „	379477	7876	0 4 7/8	5207	0 3 1/4	48884
December, „	433394	8589	0 4 3/4	7463	0 4 5/8	61833
March, 1897	363346	9049	0 5 7/8	5644	0 3 5/8	48183
June, „	383048	8976	0 5 1/2	3683	0 2 1/4	46407
September, „	417762	9264	0 5 1/4	5377	0 3	69753
December, „	467376	10216	0 5 1/8	5380	0 2 3/4	75265
March, 1898	395028	9662	0 5 3/4	6110	0 3 5/8	60607
June, „	402451	9294	0 5 1/2	5609	0 3 3/8	51312
September, „	426826	9413	0 5 1/4	4198	0 2 1/4	72887
December, „	502200	10323	0 4 5/8	9120	0 4 1/2	67943
Half Year ended:—						
June, 1899	853924	19249	0 5 3/8	16333	0 4 1/2	57015
	18558696	368682	0 4 3/4	255247	0 3 1/4	..

LONDON BRANCH DRAPERY & WOOLLENS TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales. Drapery and Woollens	Sales. Boots and Shoes.	Sales. Total.	Expenses. Amount	Expenses. Rate. s.	Expenses. Rate. d.	Amount. Profit	Amount. Loss.	Amount. Rate. s.	Amount. Rate. d.	Stocks at end.
Year ended:—	£	£	£	£	s.	d.	£	£	s.	d.	£
December, 1880 (2 q'rters)	1657	6500	8157	312	0	9 1/2	36	..	0	1	3805
" 1881	12558	13448	26006	1268	0	11 5/8	149	..	0	1 3/8	7054
" 1882	16936	15629	32565	1636	1	0	312	..	0	2 1/4	9524
" 1883	21754	17983	39737	2412	1	2 1/4	286	..	0	1 3/8	10011
" 1884 (53 weeks)	29003	19826	48829	2807	1	1 3	532	..	0	2 5/8	9977
" 1885	40448	22324	62772	3554	1	1 1/2	684	..	0	2 1/2	11502
" 1886	53749	26090	79839	4529	1	1 1/2	776	..	0	2 1/4	13713
" 1887	63224	19191	82415	5530	1	4	..	191	0	0 1/4	14967
" 1888	77888	..	77888	6901	1	9 1/4	..	1513	0	4 5/8	19484
" 1889 (53 weeks)	61455	..	61455	6050	1	11 1/2	..	2959	0	11 1/2	18189
" 1890	67084	..	67084	5317	1	7	..	1902	0	6 3/4	12607
" 1891	78583	..	78583	5752	1	5 1/4	..	7	..	..	18039
" 1892	85801	..	85801	6609	1	6 3/8	..	137	0	0 3/4	19147
" 1893	83106	..	83106	6725	1	7 3/8	..	453	0	1 1/2	20367
" 1894	89552	..	89552	6797	1	6 1/8	241	..	0	0 5/8	18486
Quarter ended:—											
March, 1895	20707	..	20707	1763	1	8 3/8	..	195	0	2 1/4	18805
June, "	24475	..	24475	1820	1	5 3/8	529	..	0	5 7/8	17201
September, " (14 weeks)	24131	..	24131	1917	1	7	93	..	0	0 7/8	19799
December, "	32648	..	32648	2048	1	3	444	..	0	3 1/4	21859
March, 1896	30293	..	30293	2244	1	5 3/4	606	..	0	4 3/4	28660
June, "	33108	..	33108	2401	1	5 1/4	551	..	0	3 7/8	25072
September, "	28676	..	28676	2471	1	8 1/8	..	171	0	1 3/4	29078
December, "	36912	..	36912	2453	1	3 7/8	442	..	0	2 3/4	28547
March, 1897	30896	..	30896	2599	1	8 1/8	66	..	0	0 1/2	32176
June, "	36417	..	36417	2616	1	5 3/8	491	..	0	3 5/8	26989
September, "	30944	..	30944	2675	1	8 5/8	79	..	0	0 1/2	31660
December, "	40046	..	40046	2903	1	5 3/8	266	..	0	1 1/4	29245
March, 1898	33565	..	33565	3095	1	10 1/4	327	..	0	2 1/4	35086
June, "	34314	..	34314	2905	1	8 1/4	793	..	0	5 1/4	30718
September, "	29765	..	29765	2858	1	11	247	..	0	1 5/8	37009
December, "	43401	..	43401	3250	1	5 7/8	1082	..	0	5 5/8	32147
Half Year ended:—											
June, 1899	83097	..	83097	6981	1	8 1/8	1483	..	0	4 1/4	38485
	1376193	140991	1517184	113198	1	5 7/8	10515	7528	..	..	..
Less Loss							7528	..	..	..	..
Leaves Net Profit							2987	..	0	0 3/8	..

Note.—To September, 1887, and March, 1889, Boot and Shoe and Furnishing figures included respectively.

LONDON BRANCH BOOT AND SHOE TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Net Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
December, 1887 (13 weeks)	7155	323	0 10 3/4	..	..	47	0 1 1/2	3891
„ 1888	30103	1593	1 0 5/8	89	0 0 5/8	..	..	4884
„ 1889 (53 weeks)	32653	1791	1 1	..	..	55	0 0 3/8	6305
„ 1890	35527	1933	1 1	165	0 1	..	..	6051
„ 1891	41249	2317	1 1 3/8	24	0 0 1/8	..	..	7337
„ 1892	46444	2978	1 3 3/8	..	..	566	0 2 7/8	12194
„ 1893	45957	3315	1 5 1/4	..	..	732	0 3 3/4	10718
„ 1894	52120	3219	1 2 3/4	..	..	416	0 1 7/8	10730
Quarter ended:—								
March, 1895	11344	836	1 5 5/8	..	..	412	0 8 5/8	10880
June, „	15560	919	1 2 1/8	305	0 4 5/8	..	..	12011
September, „ (14 weeks)	14184	886	1 2 7/8	636	0 10 3/4	..	..	11165
December, „	16116	880	1 1	148	0 2 1/8	..	..	11182
March, 1896	15188	905	1 2 1/4	50	0 0 3/4	..	..	12255
June, „	16606	985	1 2 3/8	316	0 4 3/8	..	..	12066
September, „	16009	991	1 2 3/4	97	0 1 3/8	..	..	12135
December, „	18698	949	1 0 1/8	489	0 6 1/4	..	..	13380
March, 1897	15582	1029	1 3 3/4	..	..	307	0 4 5/8	13283
June, „	19797	1083	1 1 5/8	266	0 3 1/8	..	..	13915
September, „	15679	1147	1 5 1/2	..	..	160	0 2 3/8	16491
December, „	16470	1132	1 4 1/2	27	0 0 3/8	..	..	16340
March, 1898	13785	1150	1 8	..	..	194	0 3 1/4	14492
June, „	17603	1127	1 3 1/4	17	0 0 1/8	..	..	13930
September, „	13988	1127	1 7 1/4	..	..	271	0 4 5/8	13903
December, „	18966	1138	1 2 3/8	228	0 2 7/8	..	..	14285
Half Year ended:—								
June, 1899	38159	2448	1 3 3/8	299	0 1 7/8	..	..	13170
	584942	36201	1 2 3/4	3156	..	3160	..	..
Less Profit				..	..	3156	..	
Leaves Net Loss				..	..	4	..	

LONDON BRANCH FURNISHING TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Sales.	Expenses.		Net Profit.		Net Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
December, 1889 (40 weeks)	22084	1805	1 7½	..	..	333	0 3½	4526
„ 1890	31873	2682	1 8⅛	..	..	619	0 4⅝	3957
„ 1891	40983	3056	1 5⅝	..	..	318	0 1¾	4693
„ 1892	41016	3489	1 8⅜	..	..	196	0 1⅛	5761
„ 1893	38347	3576	1 10⅜	..	..	647	0 4	7862
„ 1894	41544	3651	1 9	..	..	361	0 2	8201
Quarter ended:—								
March, 1895	9430	987	2 1	..	..	137	0 1⅝	8865
June, „	11831	987	1 8	133	0 2⅝	..	0 3⅜	8295
September, „ (14 weeks)	11503	1009	1 9	..	..	312	..	7930
December, „	14271	1059	1 5¾	183	0 3	..	0 6½	8604
March, 1896	13441	1052	1 6¾	81	0 1⅜	..	..	8753
June, „	15286	1113	1 5⅝	271	0 4⅛	..	..	9625
September, „	13490	1147	1 8¼	..	..	317	..	10017
December, „	19468	1322	1 4¼	100	0 1⅛	..	0 5⅝	10672
March, 1897	15952	1361	1 8⅜	..	..	20	..	12895
June, „	19437	1397	1 5⅛	..	..	404	0 0¼	13130
September, „	16077	1460	1 9⅜	..	..	629	0 4⅞	12656
December, „	18836	1442	1 6⅝	..	..	2114	0 9⅜	10917
March, 1898	15961	1415	1 9¼	32	0 0⅜	..	2 2⅞	11263
June, „	17175	1490	1 8⅜	..	..	141	..	11113
September, „	14691	1396	1 10⅛	..	..	169	0 2⅜	11577
December, „	20315	1584	1 6⅝	163	0 1⅞	..	..	11002
Half Year ended:—								
June, 1899	39135	3118	1 7	185	0 1⅛	..	..	10476
	502146	41598	1 7⅞	1148	..	6717	..	..
			Less Profit			1148	..	
			Leaves Net Loss			5569	0 2⅝	

LEEDS CLOTHING FACTORY TRADE.

Since Commencement.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Net Supplies.	Expenses.				Net Profit.		Net Loss.		Stocks at end.
		Sundry.	Depreciation.	Interest.	Total.	Amount.	Rate.	Amount.	Rate.	
Year ended:—	£	£	£	£	£	£	s. d.	£	s. d.	£
December, 1888 (1 quarter)	318	392	13	8	413	..	..	182	11 5¼	320
„ 1889 (53 weeks)	4132	2833	58	49	2940	..	..	812	3 11⅛	495
„ 1890	6202	3189	78	71	3338	..	..	131	0 5	1316
„ 1891	12929	5933	135	121	6189	687	1 0¾	..	..	1498
„ 1892	14476	7925	148	131	8204	640	0 10½	..	..	2274
„ 1893	18122	9846	139	127	10112	1063	1 2	..	..	2898
„ 1894	24296	12929	155	127	13211	1752	1 5¼	..	..	2662
Quarter ended:—										
March, 1895	7702	4475	81	67	4623	351	0 10⅞	..	..	2927
June, „	8466	4617	81	60	4758	404	0 11⅜	..	..	2547
September, „ (14 weeks)	7598	4255	82	68	4405	457	1 2⅜	..	..	2645
December, „	4389	3732	82	59	3873	309	1 4⅛	..	..	5276
March, 1896	9879	5064	82	70	5216	..	..	174	0 6⅝	3898
June, „	10165	5217	82	57	5356	218	0 5⅛	..	..	2792
September, „	7514	4493	82	62	4637	249	0 7⅛	..	..	3349
December, „	6830	4563	87	58	4708	531	1 6⅝	..	..	5102
Half Year ended:—										
June, 1897	24529	11428	217	145	11790	1749	1 5	..	..	3543
December, „	13200	9280	289	187	9756	1003	1 6⅛	..	..	6680
June, 1898	20573	9954	300	187	10441	1097	1 0⅜	..	..	3152
December, „	12628	8306	300	177	8783	1033	1 7⅝	..	..	5181
June, 1899	24582	11797	300	182	12279	1881	1 6¼			3554
	238530	130228	2791	2013	135032	13424	..	1299	..	..
Less Loss						1299	..			
Leaves Net Profit						12125	1 0⅛			

CRUMPSALL BISCUIT

Since commencing to

IN YEARS TO 1894; IN QUARTERS

Year or Period ended.	Net Supplies.	Production.	Expenses.			
			Sundry.	Depreciation.	Interest.	Total.
Year ended:—	£	£	£	£	£	£
January, 1874 (1 quarter)	2987	2878	604	60	87	751
„ 1875	13189	13124	2190	323	495	3008
„ 1876	13664	13392	2515	324	371	3210
„ 1877 (53 weeks)	15866	16065	3282	398	441	4121
„ 1878	18018	18126	2672	444	500	3616
„ 1879	17553	17289	2798	481	481	3760
December, 1879 (50 weeks)	16623	16454	2852	532	447	3831
„ 1880	19153	19069	2985	572	429	3986
„ 1881	20122	20274	3056	576	429	4061
„ 1882	21632	21578	3095	578	401	4074
„ 1883	21897	21712	3228	589	408	4225
„ 1884 (53 weeks)	21549	21565	3841	665	430	4936
„ 1885	21479	21830	4794	786	454	6034
„ 1886	23534	22885	5815	897	529	7241
„ 1887	28314	29100	6971	1278	745	8894
„ 1888	32079	32155	6616	1364	862	8842
„ 1889 (53 weeks)	42081	42886	7483	1375	929	9787
„ 1890	51916	54197	9431	1394	957	11782
„ 1891	68561	70942	11874	1778	1312	14964
„ 1892	70697	75580	13656	2038	1728	17422
„ 1893	86159	84531	14378	2057	1708	18143
„ 1894	96105	96511	16087	2228	1665	19980
Quarter ended:—						
March, 1895	23592	18011	3832	558	436	4826
June, „	21919	15798	4030	559	375	4964
September, „ (14 weeks)	31607	40337	5305	559	430	6294
December, „	23135	24325	4256	563	394	5213
March, 1896	26731	20496	4300	564	389	5253
June, „	25767	18396	4167	565	296	5028
*September „	16441	14552	3501	467	215	4183
December, „	14023	13394	3467	454	191	4112
March, 1897	12394	12109	3533	462	207	4202
Half Year ended:—						
September, 1897	29029	31809	8383	944	424	9751
March, 1898	31016	31661	8291	1345	662	10298
September, „	41518	38328	8580	1439	668	10687
December, „ (1 quarter)	23974	23795	4997	720	308	6025
June, 1899	48752	47444	10488	1456	577	12521
	1093076	1082548	206753	31392	21380	259525

*Note.—Dry Soap and Preserves transferred to Irlam and Middleton respectively.

WORKS TRADE.

keep a separate Account.

OR HALF YEARS SINCE 1894.

Year or Period ended.	Rate on Production.		Net Profit.		Net Loss.		Stocks at end.
	Per cent.	Per £.	Amount	Rate per £.	Amount	Rate per £.	
Year ended:—	£ s. d.	s. d.	£	s. d.	£	s. d.	£
January, 1874 (1 quarter)	26 1 10	5 2½	15	0 1¼	..	..	1678
„ 1875	22 18 5	4 7	228	0 4⅛	..	..	2029
„ 1876	23 19 5	4 9½	712	1 0⅜	..	..	1538
„ 1877 (53 weeks)	25 13 0	5 1½	630	0 9⅜	..	..	2867
„ 1878	19 18 11	3 11⅝	514	0 6¾	..	..	2961
„ 1879	21 15 0	4 4⅛	1518	1 9	..	..	2506
December, 1879 (50 weeks)	23 5 8	4 7⅝	1004	1 2⅝	..	..	2335
„ 1880	20 18 1	4 2⅛	983	1 0½	..	..	1793
„ 1881	20 0 7	4 0	887	0 10½	..	..	2105
„ 1882	18 17 7	3 9½	1498	1 4⅝	..	..	1703
„ 1883	19 9 2	3 10⅝	2081	1 11	..	..	1896
„ 1884 (53 weeks)	22 17 9	4 6⅞	2030	1 10½	..	..	2129
„ 1885	27 12 9	5 6½	1491	1 4⅝	..	..	3534
„ 1886	31 12 9¾	6 3⅞	..	..	61	0 0½	4207
„ 1887	28 16 10¾	5 9⅜	..	..	3	..	5518
„ 1888	27 9 11½	5 5⅞	..	..	222	0 1⅝	7693
„ 1889 (53 weeks)	22 16 11⅜	4 6¾	1274	0 7¼	..	..	9411
„ 1890	21 14 9⅜	4 4⅛	39	0 0⅛	..	..	12712
„ 1891	21 1 10⅜	4 2⅞	3281	0 11⅜	..	..	22353
„ 1892	23 1 0¼	4 7¼	2495	0 8⅜	..	..	28264
„ 1893	21 9 3⅛	4 3⅛	2401	0 6⅝	..	..	25454
„ 1894	20 14 0½	4 1⅝	6309	1 3¾	..	..	26409
Quarter ended:—							
March, 1895	26 15 10⅝	5 4½	1944	1 7¾	..	..	20469
June, „	31 8 5½	6 3⅜	1177	1 0⅝	..	..	15611
September, „ (14 weeks)	15 12 0⅜	3 1⅜	4083	2 7	..	..	27682
December, „	21 8 7½	4 3⅜	1810	1 6¾	..	..	28905
March, 1896	25 12 7	5 1½	671	0 6	..	..	20252
June, „	27 6 7⅝	5 5½	967	0 9	..	..	11252
*September, „	28 14 10¾	5 8⅞	1080	1 3¾	..	..	7081
December, „	30 14 0	6 1⅝	57	0 0⅞	..	..	7715
March, 1897	34 14 0¼	6 11¼	..	..	595	0 11½	9624
Half Year ended:—							
September, 1897	30 13 1⅛	6 1½	49	0 0⅜	..	..	12924
March, 1898	32 10 6⅛	6 6	..	..	1425	0 11	13293
September, „	27 17 7⅝	5 6⅞	3235	1 6⅝	..	..	11411
December, „ (1 quarter)	25 6 4⅝	5 0⅝	2400	2 0	..	..	11723
June, 1899	26 7 9¾	5 3¼	5426	2 2⅝	..	..	10314
	23 19 5⅝	4 9½	52289	..	2306	..	..
Less Loss			2306	..			
Leaves Net Profit..			49983	0 10⅞			

* Note.—Dry Soap and Preserves transferred to Irlam and Middleton respectively.

LEICESTER BOOT AND

Since commencing to

IN YEARS TO 1894; IN QUARTERS

Year or Period ended.	Net Supplies.	Production.	Expenses.			
			Sundry.	Depreciation.	Interest.	Total.
Year ended:—	£	£	£	£	£	£
January, 1874 (1 quarter)	3422	5190	1281	6	29	1316
„ 1875	29456	38684	10047	36	342	10425
„ 1876	53687	53702	16936	124	543	17603
„ 1877 (53 weeks)	62205	60104	20631	246	780	21657
„ 1878	71140	67603	23357	416	1023	24796
„ 1879	73881	72939	25902	424	998	27324
December, 1879 (50 weeks)	77476	77746	28016	417	945	29378
„ 1880	84655	84429	29866	444	1241	31551
„ 1881	87607	89150	32682	448	1087	34217
„ 1882	99098	99517	36388	495	1113	37996
„ 1883	91986	90214	33868	511	1040	35419
„ 1884 (53 weeks)	107166	106333	39237	838	1267	41342
„ 1885	109464	107806	39846	1077	1315	42238
„ 1886	122463	122703	44781	1104	1244	47079
„ 1887	126417	124324	45895	1120	1230	48245
„ 1888	143488	139955	53206	1124	1381	55711
„ 1889 (53 weeks)	172267	175712	65998	1236	1633	68867
„ 1890	206499	220763	81461	1140	2134	84735
„ 1891	235410	230858	89350	995	2679	93024
„ 1892	256116	292383	109811	3755	4364	117930
„ 1893	243296	222310	90741	4639	5633	101013
„ 1894	258038	255428	100218	4821	5278	110317
Quarter ended:—						
March, 1895	69745	64692	26480	1227	1422	29129
June, „	85413	73515	28154	1253	1370	30777
September, „ (14 weeks)	64867	64536	26294	1289	1468	29051
December, „	51542	66137	24875	1290	1277	27442
March, 1896	85167	79948	29063	1326	1311	31700
June, „	78011	63901	26444	1342	1278	29064
September, „	59937	53830	22491	1342	1330	25163
December, „	59918	68852	27157	1354	1318	29829
Half Year ended:—						
June, 1897	172495	169307	62254	2763	2501	67518
December, „	124890	147019	56716	2784	2582	62082
June, 1898	164583	137540	54960	2786	2613	60359
December, „	118411	114724	46900	2812	2248	51960
June, 1899	182018	171323	64611	2813	2262	69686
	4032234	4013177	1515867	49797	60279	1625943

SHOE WORKS TRADE.

keep a separate Account.

OR HALF YEARS SINCE 1894.

Year or Period ended.	Rate on Production.		Net Profit.		Net Loss.		Stocks at end.
	Per cent.	Per £.	Amount	Rate.	Amount	Rate.	
Year ended:—	£ s. d.	s. d.	£	s. d.	£	s. d.	£
January, 1874 (1 quarter)	25 6 8	5 0 3/4	..	..	8	0 0 1/2	2579
„ 1875	26 18 11	5 4 5/8	584	0 3 5/8	..	..	6466
„ 1876	32 15 6	6 6 5/8	912	0 4	..	..	9186
„ 1877 (53 weeks)	36 0 6	7 2 3/8	886	0 3 1/2	..	..	14131
„ 1878	36 13 6	7 4	211	0 0 3/4	..	..	12922
„ 1879	37 9 9	7 6	1575	0 5 1/8	..	..	14515
December, 1879 (50 weeks)	37 15 8	7 6 5/8	1645	0 5	..	..	24733
„ 1880	37 7 4	7 5 5/8	..	..	309	0 0 7/8	15772
„ 1881	38 8 8	7 8	452	0 1 1/2	..	..	15594
„ 1882	38 3 5	7 7 1/2	1649	0 3 5/8	..	..	14192
„ 1883	39 5 2	7 10 3/8	190	0 0 1/2	..	..	10384
„ 1884 (53 weeks)	38 17 7	7 9 1/4	3261	0 7 3/8	..	..	17800
„ 1885	39 3 7	7 10	3078	0 6 3/4	..	..	15752
„ 1886	38 7 4 3/8	7 8	6059	0 11 3/4	..	..	17738
„ 1887	38 16 1 3/8	7 9 1/8	6344	1 0	..	..	19116
„ 1888	39 16 1 1/2	7 11 1/2	6453	0 10 3/8	..	..	22496
„ 1889 (53 weeks)	39 3 10 1/4	7 10	8347	0 11 5/8	..	..	33265
„ 1890	38 7 7 3/4	7 8	8743	0 10 1/4	..	..	61935
„ 1891	40 5 10 3/4	8 0 5/8	2594	0 2 5/8	..	..	62980
„ 1892	40 6 8 1/8	8 0 3/4	4961	0 4 5/8	..	..	97381
„ 1893	45 8 9	9 1	..	..	1271	0 1 1/4	88812
„ 1894	43 3 9 3/8	8 7 5/8	9574	0 8 7/8	..	..	92078
Quarter ended:—							
March, 1895	45 0 6 1/2	9 0	2590	0 8 7/8	..	..	85337
June, „	41 17 3 1/2	8 4 3/8	4280	1 0	..	..	76550
September, „ (14 weeks)	45 0 3 3/8	9 0	365	0 1 1/4	..	..	89206
December, „	41 9 10 1/8	8 3 1/2	1254	0 5 1/4	..	..	101621
March, 1896	39 13 0 1/4	7 11 1/2	2258	0 6 1/4	..	..	89440
June, „	45 9 7 1/4	9 1 1/2	1939	0 5 1/4	..	..	95079
September, „	46 14 10 1/4	9 4 1/2	1422	0 5 5/8	..	..	91618
December, „	43 6 5 1/2	8 7 5/8	903	0 3 1/2	..	..	97588
Half Year ended:—							
June, 1897	39 17 6 7/8	7 11 5/8	6645	0 9 1/8	..	..	82064
December, „	42 4 6 1/2	8 5 1/4	2222	0 4 1/2	..	..	115125
June, 1898	43 17 8 1/4	8 9 1/4	3214	0 4 5/8	..	..	77560
December, „	45 5 9 1/8	9 1	1242	0 2 1/2	..	..	82995
June, 1899	40 13 6	8 1 1/2	2338	0 3	..	..	74707
	40 10 3 5/8	8 1 1/8	98190	..	1588	..	..
		Less Loss	1588	..			
		Leaves Net Profit	96602	0 5 5/8			

HECKMONDWIKE BOOT, SHOE,

Since

IN YEARS TO 1894; IN QUARTERS

Year or Period ended.	Works, Total Supplies.	Boots and Shoes, Production.	Expenses (Including Currying Department).			
			Sundry,	Depreciation.	Interest.	Total.
Year ended:—	£	£	£	£	£	£
December, 1880 (2 quart'rs)	3060	3438	1057	16	30	1103
„ 1881	11151	11417	3592	57	157	3806
„ 1882	14602	15454	5041	66	183	5290
„ 1883	16661	16377	5435	68	222	5725
„ 1884 (53 weeks)	18215	18138	5924	94	220	6238
„ 1885	22666	23811	7832	176	256	8264
„ 1886	22231	23418	7867	267	405	8539
„ 1887	22519	19641	7110	313	380	7803
„ 1888	29307	22998	9371	488	588	10447
„ 1889 (53 weeks)	29815	22899	9155	602	687	10444
„ 1890	35135	28064	11036	719	797	12552
„ 1891	42919	34853	13903	748	872	15523
„ 1892	46198	39347	15155	784	926	16865
„ 1893	40679	36431	15256	931	1154	17341
„ 1894	46843	36564	15986	1019	1217	18222
Quarter ended:—						
March, 1895	12583	10615	4480	265	305	5050
June, „	9750	9253	3941	265	316	4522
September, „ (14 weeks)	13219	11476	4956	266	345	5567
December, „	17209	14055	5195	274	273	5742
March, 1896	13288	10392	4910	275	276	5461
June, „	8836	6391	3488	280	296	4064
September, „	12504	9872	4801	292	294	5387
December, „	17218	12746	5535	292	274	6101
March, 1897	14111	12535	5881	296	283	6460
Half Year ended:—						
September, 1897	22891	19716	8756	776	595	10127
March, 1898	24841	24113	9692	937	623	11252
September, „	18294	18196	7840	979	699	9518
December, „ (1 quarter)	18309	11692	4967	486	313	5766
June, 1899	26899	23862	10543	982	605	12130
	631903	547764	218705	18013	18591	245309

AND CURRYING TRADE.

Commencement.

OR HALF YEARS SINCE 1894.

Year or Period ended.	Boots and Shoes Expenses, Rate on Production.		Works.				Stocks at end.
			Net Profit.		Net Loss.		
	Per cent.	Per £.	Amount	Rate.	Amount	Rate.	
Year ended:—	£ s. d.	s. d.	£	s. d.	£	s. d.	£
December, 1880 (2 quart'rs)	32 1 7	6 4⅞	..	..	181	1 0⅝	2473
„ 1881	33 6 8	6 8	..	..	608	1 0¾	2238
„ 1882	34 4 8	6 10⅛	..	..	163	0 2½	4016
„ 1883	34 19 1⅞	6 11⅝	294	0 4½	..	..	3950
„ 1884 (53 weeks)	34 7 10	6 10½	287	0 3¾	..	..	3506
„ 1885	34 14 1	6 11¼	261	0 2¾	..	..	5314
„ 1886	36 9 3⅛	7 3½	375	0 4	..	..	6869
„ 1887	37 10 3⅛	7 6	237	0 2¾	..	..	5382
„ 1888	35 3 10⅝	7 0⅝	1021	0 8¼	..	..	10863
„ 1889 (53 weeks)	35 10 8⅛	7 1⅞	1922	1 3⅜	..	..	10280
„ 1890	34 15 9½	6 11⅜	1398	0 9½	..	..	11325
„ 1891	36 1 2⅜	7 2½	3280	1 6¼	..	..	14594
„ 1892	35 15 10	7 1⅞	2017	0 10⅜	..	..	15875
„ 1893	39 18 7¼	7 11¾	1132	0 6⅜	..	..	19487
„ 1894	40 14 8⅛	8 1¾	1200	0 6⅛	..	..	18260
Quarter ended:—							
March, 1895	40 3 4⅝	8 0⅜	..	..	119	0 2¼	19835
June, „	39 19 6¼	7 11⅞	968	1 11¾	..	..	21444
September, „ (14 weeks)	39 14 6¼	7 11¼	..	..	167	0 3	21959
December, „	34 0 2⅜	6 9⅞	1105	1 3⅜	..	..	20711
March, 1896	43 6 0⅜	8 7⅞	..	..	1253	1 10½	23504
June, „	49 18 7	9 11⅜	..	..	791	1 9⅜	21100
September, „	45 16 6⅜	9 1⅝	..	..	138	0 2⅜	20901
December, „	40 17 0⅜	8 2	..	..	612	0 8½	17481
March, 1897	43 12 1⅜	8 8⅝	..	..	1497	2 1⅜	15858
Half Year ended:—							
September, 1897	43 14 1¼	8 8⅞	..	..	246	0 2½	16722
March, 1898	40 1 1⅝	8 0⅛	353	0 3⅜	..	..	16108
September, „	42 16 10⅝	8 6⅝	211	0 2¾	..	..	19768
December, „ (1 quarter)	40 14 10⅞	8 1¾	403	0 5¼	..	..	15703
June, 1899	42 11 6¾	8 6⅜	102	0 0⅞	..	..	17867
	38 5 3⅝	7 7¾	16566	..	5775	..	..
		Less Loss	5775	..			
		Leaves Net Profit	10791	0 4			

HECKMONDWIKE CURRYING TRADE, stated separately;

Figures included in Heckmondwike Accounts.

Since Commencement.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

Year or Period ended.	Supplies.	Expenses.					Profit.		Loss.		Stocks at end.
		Sundry.	Depreciation.	Interest.	Total.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
Year ended:—	£	£	£	£	£	s. d.	£	s. d.	£	s. d.	£
December, 1887 (1 quarter)	538	391	27	17	435	16 2	55	2 0½	..	..	213
„ 1888	3362	2065	169	119	2353	13 11⅞	413	2 5⅜	..	..	687
„ 1889 (53 weeks)	3263	1937	227	143	2307	14 1⅜	..	..	201	1 2¾	306
„ 1890	4103	2361	262	166	2789	13 7⅛	390	1 10¾	..	..	399
„ 1891	4404	2524	264	167	2955	13 5	340	1 6½	..	..	415
„ 1892	3755	2350	264	168	2782	14 9¾	..	..	36	0 2¼	286
„ 1893	3795	2341	270	183	2794	14 8⅝	219	1 1¾	..	..	447
„ 1894	4631	2790	316	222	3328	14 4⅜	365	1 6⅞	..	..	651
Quarter ended:—											
March, 1895	1242	641	85	60	786	12 7⅝	3	0 0½	..	..	447
June, „	1046	679	86	58	823	15 8⅜	7	0 1½	..	..	488
September, „ (14 weeks)	1313	862	87	59	1008	15 4⅜	..	..	21	0 3⅜	548
December, „	1451	824	87	51	962	13 3	71	0 11⅝	..	..	355
March, 1896	1116	831	87	43	961	17 2⅝	..	..	76	1 4¼	415
June, „	1178	739	87	47	873	14 9⅜	30	0 6	..	..	326
September, „	1246	733	87	43	863	13 10½	140	2 2⅝	..	..	365
December, „	1505	765	87	42	894	11 10½	121	1 7¼	..	..	191
March, 1897	1154	866	87	41	994	17 2⅝	..	..	56	..	185
Half Year ended:—											
September, 1897	1638	1208	203	99	1510	18 5½	..	..	136	1 7⅝	177
March, 1898	2015	1289	206	98	1593	15 9⅝	69	0 8⅛	..	..	226
September, „	2054	1417	207	98	1722	16 9⅜	..	..	73	0 8½	182
December, „ (1 quarter)	1441	849	104	49	1002	13 10⅝	243	3 4⅜	..	..	244
June, 1899	2743	1659	213	98	1970	14 4¼	136	0 11⅝	..	..	173
	48993	30121	3512	2071	35704	14 6⅞	2602	..	599	..	..
							599	..			
				Less Loss							
				Leaves Net Profit			2003	0 9⅝			

DUNSTON CORN MILL TRADE.

Since Commencement.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

	Net Supplies.	Production.	Expenses.				Rate on Production.		Net Profit.		Net Loss.		Stocks at end.
			Sundry.	Depreciation.	Interest.	Total.	Per cent.	Per £.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	£	£	£	£	£ s. d.	s. d.	£	s. d.	£	s. d.	£
December, 1891 (36 weeks)....	178683	185104	8994	3631	3033	15658	8 9 $2\frac{1}{4}$	1 $8\frac{1}{4}$	..	..	543	0 $0\frac{5}{8}$	72252
„ 1892	343264	346804	16239	6255	4912	27406	7 18 $0\frac{1}{2}$	1 $6\frac{7}{8}$	..	..	17838	1 $0\frac{5}{8}$	46831
„ 1893	311508	313858	17386	6570	4921	28877	9 4 $0\frac{1}{8}$	1 10	..	..	7078	0 $5\frac{3}{4}$	42620
„ 1894	279706	270976	19807	6589	5130	31526	11 12 $8\frac{5}{8}$	2 $3\frac{7}{8}$	..	..	9659	0 $8\frac{1}{4}$	65020
Quarter ended:—													
March, 1895	88585	76960	4794	1653	1218	7665	9 19 $2\frac{1}{4}$	1 $11\frac{7}{8}$	660	0 $1\frac{3}{4}$	..	..	32947
June, „	100936	94272	5825	1659	1243	8727	9 5 $1\frac{5}{8}$	1 $10\frac{5}{8}$	1248	0 $2\frac{5}{8}$	..	..	48039
September, „ (14 weeks)....	107439	105683	6862	1676	1459	9997	9 9 $2\frac{1}{4}$	1 $10\frac{3}{8}$	622	0 $1\frac{3}{8}$	..	..	92577
December, „	111047	108979	6252	1682	1303	9237	8 9 $6\frac{3}{4}$	1 $8\frac{1}{4}$	704	0 $1\frac{1}{2}$	..	..	71974
March, 1896	109573	108816	6935	1684	1148	9767	8 19 $6\frac{1}{8}$	1 $9\frac{1}{2}$	905	0 $1\frac{7}{8}$	..	..	56691
June, „	110490	108221	5832	1684	1347	8863	8 3 $9\frac{1}{2}$	1 $7\frac{5}{8}$	34	..	..	..	89125
September, „	107768	106643	6432	1689	1421	9542	8 18 $11\frac{3}{8}$	1 $9\frac{3}{8}$	515	0 $1\frac{1}{8}$	..	..	94115
December, „	126249	128228	7271	1690	1189	10150	7 18 $3\frac{5}{8}$	1 $6\frac{5}{8}$	3710	0 7	..	..	78073
Half Year ended:—													
June, 1897	252609	247743	13233	3380	2511	19124	7 14 $4\frac{5}{8}$	1 $6\frac{1}{8}$	..	..	6084	0 $5\frac{3}{4}$	82896
December, „	284866	283446	14026	3383	2121	19530	6 17 $9\frac{5}{8}$	1 $4\frac{1}{2}$	792	0 $0\frac{5}{8}$	..	..	51656
June, 1898	311640	310720	12029	3382	1985	17396	5 11 $11\frac{3}{8}$	1 $1\frac{3}{8}$	1537	0 $1\frac{1}{4}$	..	..	51076
December, „	292523	277455	12388	3380	1552	17320	6 4 $10\frac{1}{8}$	1 $2\frac{5}{8}$	4430	0 $3\frac{5}{8}$	..	..	30086
June, 1899	275610	275611	14642	3380	1586	19558	7 1 11	1 5	4026	0 $3\frac{1}{4}$	..	..	35748
	3392496	3349519	178947	53367	38029	270343	8 1 5	1 $7\frac{1}{4}$	19183	..	41202	..	..
										Less Profit	19183	..	
										Leaves Net Loss	22019	0 $1\frac{1}{2}$	

DURHAM SOAP WORKS SUPPLIES,

Since

Year or Quarter ended.	Net Supplies.	Production.	Expenses.			
			Sundry.	Depreciation.	Interest.	Total.
	£	£	£	£	£	£
From January, 1875, to December, 1889 (inclusive), 14 years 11 months	214496	216091	15582	4472	4911	24965
Year ended:—						
December, 1890	28456	26318	1800	327	255	2382
„ 1891	33432	32303	1869	173	269	2311
„ 1892	33981	32528	1842	172	268	2282
„ 1893	37900	37716	1974	173	218	2365
„ 1894	37684	35759	2118	176	263	2557
„ 1895	32165	32453	2032	179	296	2507
Quarter ended:—						
March, 1896	5706	4744	314	52	50	416
Works closed March 26th, 1896.	423820	419912	27531	5724	6580	39785

IRLAM SOAP

Since

QUARTERLY OR

Period.	Net Supplies.	Production.	Expenses.			
			Sundry.	Depreciation.	Interest.	Total.
Quarter ended:—	£	£	£	£	£	£
September, 1895 (7 weeks)	4496	11161	796	197	186	1179
December, „	22503	21230	2801	610	470	3881
March, 1896	20319	22511	2894	664	542	4100
June, „	25609	25372	3078	675	622	4375
September, „	28616	27519	3026	681	642	4349
December, „	26548	27750	3258	710	622	4590
Half Year ended:—						
June, 1897	55133	55254	7890	1505	1286	10681
December, „	75344	76927	10281	1797	1399	13477
June, 1898	77739	77276	9753	1986	1535	13274
December, „	93023	87570	10215	2200	1600	14015
June, 1899	99539	105560	11801	2312	1637	15750
	528869	538130	65793	13337	10541	89671

EXPENSES, PROFIT, AND STOCKS.

Commencing.

Year or Quarter ended.	Rate on Production.		Net Profit.		Net Loss.		Stocks at end.
	Per cent.	Per £.	Amount.	Rate.	Amount.	Rate.	
	£ s. d.	s. d.	£	s. d.	£	s. d.	£
From January, 1875, to December, 1889 (inclusive), 14 years 11 months	11 11 0⅝	2 3⅝	2680	0 27/8	..	..	4938
Year ended:—							
December, 1890	8 8 2⅜	1 8⅛	733	0 6⅛	..	..	5097
„ 1891	7 3 0⅞	1 5⅛	1248	0 8⅞	..	..	5694
„ 1892	7 0 3⅝	1 4¾	2316	1 4⅛	..	..	3251
„ 1893	6 5 4⅞	1 3	2192	1 1⅝	..	..	3051
„ 1894	7 3 0⅝	1 5⅛	2366	1 3	..	..	6400
„ 1895	7 14 6	1 6⅛	2878	1 9⅜	..	..	3755
Quarter ended:—							
March, 1896	8 15 4½	1 9	535	1 10½	..	..	2046
Works closed March 26th, 1896.	9 9 5⅞	1 10⅝	14948	0 8⅜	..	..	..

WORKS TRADE.

Commencement.

HALF YEARLY ACCOUNTS.

Period.	Rate on Production.		Net Profit.		Net Loss.		Stocks at end.
	Per cent.	Per £.	Amount	Rate.	Amount	Rate.	
Quarter ended:—	£ s. d.	s. d.	£	s. d.	£	s. d.	£
September, 1895 (7 weeks)	10 11 3¼	2 1½	..	..	774	3 5½	26556
December, „	18 5 7⅝	3 7¾	1143	1 0⅛	..	..	30825
March, 1896	18 4 3½	3 7⅝	1099	1 0⅛	..	..	38007
June, „	17 4 10⅜	3 5⅝	1781	1 4⅝	..	..	39592
September, „	15 16 0⅜	3 1⅞	2362	1 7¾	..	..	42666
December, „	16 10 9⅝	3 3⅝	2580	1 11¼	..	..	45747
Half Year ended:—							
June, 1897	19 6 7¼	3 10⅜	3316	1 2⅜	..	..	49000
December, „	17 10 4⅛	3 6	4235	1 1⅜	..	..	46347
June, 1898	17 3 6½	3 5⅛	4596	1 2⅛	..	..	51104
December, „	16 0 1	3 2⅝	5311	1 1⅝	..	..	44103
June, 1899	14 18 4⅞	2 11¼	5265	1 0⅝	..	..	56596
	16 13 3⅛	3 3⅞	30914	1 2	..	..	..

BATLEY WOOLLEN

Since

IN YEARS TO 1894; IN QUARTERS

Year or Period ended.	Net Supplies.	Pro-duction.	Expenses.			
			Sundry.	Depre-ciation.	Interest	Total.
Year ended:—	£	£	£	£	£	£
December, 1887	2478	8495	3720	131	164	4015
„ 1888	11590	13896	6063	297	513	6873
„ 1889 (53 weeks)	17189	12332	5705	333	534	6572
„ 1890	13069	12955	5485	363	396	6244
„ 1891	17018	17178	6267	396	407	7070
„ 1892	16155	15870	5799	422	390	6611
„ 1893	17513	17239	6125	468	414	7007
„ 1894	20553	20414	6139	477	407	7023
Quarter ended:—						
March, 1895	4942	4426	1281	119	87	1487
June, „	4551	5438	1580	119	95	1794
September, „ (14 weeks)	7345	7293	2014	119	102	2235
December, „	7188	7096	1933	119	88	2140
March, 1896	7278	7106	1886	119	84	2089
June, „	6482	6274	1635	161	111	1907
September, „	6140	6622	1850	161	107	2118
December, „	7523	8288	2359	161	115	2635
March, 1897	7217	6651	1992	168	114	2274
Half Year ended:—						
September, 1897	20080	18288	4668	362	233	5263
March, 1898	15295	15794	4489	362	244	5095
September, „	16537	16421	4597	374	243	5214
December, „ (1 quarter)	7792	8485	2515	264	172	2951
June, 1899	20852	20595	5817	543	350	6210
	254787	257096	83419	6038	5370	94827

MILL TRADE.

Commencement.

OR HALF YEARS SINCE 1894.

Year or Period ended.	Rate on Production.		Net Profit.		Net Loss.		Stocks at end.
	Per cent.	Per £.	Amount	Rate.	Amount	Rate.	
Year ended :—	£ s. d.	s. d.	£	s. d.	£	s. d.	£
December, 1887	47 5 3¼	9 5⅝	..	..	483	3 10⅜	8061
„ 1888	49 13 5⅞	9 11½	..	..	1629	2 9⅝	11876
„ 1889 (53 weeks).	53 5 10⅜	10 7⅝	..	..	3918	4 6⅝	7308
„ 1890	48 3 11⅜	9 7⅝	..	..	766	1 2	7326
„ 1891	41 3 1⅜	8 2⅞	622	0 8¾	..	..	7740
„ 1892	41 13 1⅝	8 3⅞	325	0 4¼	..	..	7557
„ 1893	40 12 11	8 1½	312	0 4¼	..	..	6943
„ 1894	34 8 0⅝	6 10½	822	0 9½	..	..	6353
Quarter ended :—							
March, 1895	33 11 11¼	6 8⅝	176	0 8½	..	..	5444
June, „	32 19 9¼	6 7⅛	119	0 6¼	..	..	7714
September, „ (14 weeks)	30 12 10⅞	6 1⅞	281	0 9⅛	..	..	7707
December, „	30 3 1⅝	6 0⅜	382	1 0¾	..	..	8139
March, 1896	29 7 11⅜	5 10½	295	0 9⅝	..	..	6977
June, „	30 7 10¼	6 0⅞	287	0 10½	..	..	6737
September, „	31 19 8½	6 4⅜	9	0 0¼	..	..	7616
December, „	31 15 10¼	6 4¼	238	0 7½	..	..	8680
March, 1897	34 3 9⅝	6 10	247	0 8⅛	..	..	7957
Half Year ended :—							
September, 1897	28 15 6¾	5 9	909	0 10¾	..	..	8039
March, 1898	32 5 2⅛	6 5⅜	827	1 0⅞	..	..	7600
September, „	31 15 0⅜	6 4⅛	142	0 2	..	..	8823
December, „ (1 quarter)	34 15 6⅛	6 11⅜	214	0 6½	..	..	11131
June, 1899	30 3 0⅝	6 0¼	850	0 9¾	..	..	12290
	36 17 8⅛	7 4½	7057	..	6796	..	..
		Less Loss	6796	..			
		Leaves Net Profit	261	0 0⅛			

BROUGHTON CABINET WORKS TRADE.

Since Commencement.

IN YEARS TO 1894; IN QUARTERS OR HALF YEARS SINCE 1894.

NOTE.—These figures are included in the Manchester Furnishing Department Account up to June Quarter, 1895, inclusive, now separately stated in Productive Accounts.

YEAR OR PERIOD ENDED.	Supplies.	EXPENSES.				RESULT OF WORKING.		Stocks at end.
		Sundry.	Depreciation.	Interest.	Total.	Loss.	Rate per £ on Supplies.	
Year ended:—	£	£	£	£	£	£	s. d.	£
December, 1892 ..	..	..	..	..	..	..	..	307
„ 1893 ..	4399	3488	349	329	4166	630	2 10¼	3360
„ 1894 ..	9453	5966	443	489	6898	212	0 5⅜	5343
Quarter ended:								
March, 1895 ..	1745	1366	111	135	1612	311	3 6¾	5711
June, „ ..	1978	1384	104	133	1621	199	2 0⅛	5905
†September, „ ..	2368	1550	104	131	1785	*3	0 0¼	6800
December, „ ..	2480	1688	105	109	1902	*44	0 4¼	7257
March, 1896 ..	1896	1429	103	118	1650	392	4 1½	7836
June, „ ..	3025	1726	103	122	1951	168	1 1¼	7524
September, „ ..	2920	2010	103	123	2236	551	3 9¼	8212
December, „ ..	3530	2197	103	120	2420	151	0 10¼	8732
Half Year ended:—								
June, 1897 ..	5187	3572	209	259	4040	523	2 0⅛	9868
December, „ ..	7270	4230	256	290	4776	423	1 1⅞	9044
June, 1898 ..	6861	4088	270	292	4650	261	0 9⅛	9246
December, „ ..	6099	4048	252	278	4578	618	2 0¼	9657
June, 1899 ..	6287	4001	246	270	4517	941	2 11⅞	9139
	65498	42743	2861	3198	48802	5333	1 7½	..

*Profit. †Fourteen weeks.

BROUGHTON CLOTHING WORKS TRADE.

Since commencing to publish separate Accounts in the Balance Sheet.

Period.	Supplies.	Expenses.				Result of Working.		Stocks at end.
		Sundry.	Depreciation.	Interest.	Total.	Profit.	Rate per £ on Supplies.	
Quarter ended:	£	£	£	£	£	£	s. d.	£
†September, 1895..	3668	2368	83	58	2509	64	0 $4\frac{1}{8}$	712
December, „ ..	3893	2552	88	48	2688	190	0 $11\frac{5}{8}$	1003
March, 1896..	5113	3161	92	55	3308	*185	0 $8\frac{5}{8}$	1197
June, „ ..	6315	3857	92	57	4006	237	0 9	1307
September, „ ..	5019	3278	92	58	3428	198	0 $9\frac{3}{8}$	1548
December, „ ..	5577	3486	92	56	3634	189	0 $8\frac{1}{8}$	1703
Half Year:								
June, 1897..	15077	9536	260	159	9955	*60	0 $0\frac{7}{8}$	1389
December, „ ..	11933	8215	411	243	8869	*659	1 $1\frac{1}{4}$	3217
June, 1898..	16153	10487	420	274	11181	60	0 $0\frac{7}{8}$	4042
December, „ ..	11093	7642	420	257	8319	*833	1 6	3038
June, 1899..	16913	11111	430	248	11789	58	0 $0\frac{3}{4}$	2674
	100754	65693	2480	1513	69686	*741	0 $1\frac{3}{4}$	..

* Loss. † Fourteen weeks.

LONGSIGHT PRINTING WORKS TRADE.

From Commencement.

QUARTERLY OR HALF-YEARLY ACCOUNTS.

Period.	Supplies.	Expenses.						Result of Working.			Stocks at end.
		Sundry.	Depreciation.	Interest.	Total.	Rate per £ on Supplies.		Profit.	Rate per £ on Supplies.		
Quarter:	£	£	£	£	£	s.	d.	£	s.	d.	£
†March, 1895	296	280	50	36	366	24	8¾	*50	3	4½	399
June, „	1662	739	154	115	1008	12	1½	60	0	8⅝	432
‡Sept., „	2284	1030	175	136	1341	11	8⅞	168	1	5⅝	666
Dec., „	3270	1342	212	128	1682	10	3⅜	297	1	9¾	1089
March, 1896	3679	1431	228	136	1795	9	9•	175	0	11⅜	783
June, „	3272	1435	241	147	1823	11	1⅝	121	0	8¾	832
Sept., „	3887	1911	258	151	2320	11	11⅛	265	1	4¼	1124
Dec., „	4495	2610	284	165	3059	13	7¼	134	0	7⅛	2255
March, 1897	6297	2757	287	175	3219	10	2⅝	167	0	6¼	1519
Half Year:											
Sept., 1897	11148	4979	582	332	5893	10	6¾	771	1	4½	1019
March, 1898	12787	5352	582	331	6265	9	8¾	1264	1	11⅝	1274
Sept., 1898	11865	5997	724	368	7089	11	11⅜	296	0	5⅞	1918
§Dec., „	9450	4795	699	329	5823	12	3⅞	171	0	4½	4300
June, 1899	21513	9981	1634	777	12392	11	6⅛	340	0	3¾	4598
	95905	44639	6110	3326	54075	11	3¼	4179	0	10⅜	..

* Loss. † Seven weeks. ‡ Fourteen weeks. § One Quarter.

LITTLEBOROUGH FLANNEL WORKS TRADE.

From Commencement.

QUARTERLY OR HALF-YEARLY ACCOUNTS.

Period ended	Net Supplies.	Expenses.				Net Profit.		Stocks at end.
		Sundry.	Depreciation.	Interest	Total.	Amount.	Rate.	
	£	£	£	£	£	£	s. d.	£
September, 1898 (half year)	10130	2030	259	183	2472	*5	0 $0\frac{1}{8}$	7240
December, „ (quarter) .	5022	1054	129	68	1251	145	0 $6\frac{7}{8}$	8146
June, 1899 (half year)	7843	2256	259	155	2670	150	0 $4\frac{1}{2}$	10700
	22995	5340	647	406	6393	290	0 3	..

* Loss.

MANCHESTER TOBACCO FACTORY TRADE.

From Commencement.

QUARTERLY OR HALF-YEARLY ACCOUNTS.

Period ended	Net Supplies.	Expenses.				Net Profit.		Stocks at end.
		Sundry.	Depreciation.	Interest	Total.	Amount.	Rate.	
	£	£	£	£	£	£	s. d.	£
September, 1898 ($15\frac{1}{2}$ weeks)	23276	2296	121	198	2615	351	0 $3\frac{3}{4}$	12376
December, „ (quarter) .	32294	2076	110	227	2413	1391	0 $10\frac{1}{4}$	26847
June, 1899 (half year)	72138	5279	288	490	6057	1571	0 $5\frac{1}{8}$	25972
	127708	9651	519	915	11085	3313	0 $6\frac{1}{2}$	..

LONGTON CROCKERY

Since

IN YEARS TO 1894; IN QUARTERS

Year or Period ended.	Supplies.			Total Expenses.	
	Selves.	Scottish.	Total.	Amount.	Rate.
Year ended:—	£	£	£	£	s. d.
December, 1886 (2 quarters)	3968	..	3968	372	1 10½
„ 1887	11925	304	12229	876	1 5⅝
„ 1888	14473	1072	15545	1000	1 3⅜
„ 1889 (53 weeks).....	17466	1183	18649	1174	1 3
„ 1890	21792	981	22773	1644	1 5¼
„ 1891	27238	26	27264	1819	1 4
„ 1892	29627	..	29627	2014	1 4¼
„ 1893	23080	..	23080	2117	1 10
„ 1894	28388	..	28388	2161	1 6¼
Quarter ended:—					
March, 1895	7103	..	7103	577	1 7⅜
June, „	6677	..	6677	675	2 0½
September, „ (14 weeks).....	8097	..	8097	707	1 8⅞
December, „	9918	..	9918	771	1 6⅝
March, 1896	7200	..	7200	755	2 1½
June, „	7356	..	7356	742	2 0⅛
September, „	10008	132	10140	718	1 4⅛
December, „	12139	66	12205	905	1 5⅜
March, 1897	9154	136	9290	762	1 7⅛
June, „	13138	161	13299	948	1 5
September, „	11756	96	11852	768	1 3½
December, „	15215	70	15285	791	1 0⅜
March, 1898	10479	184	10663	802	1 6
June, „	12105	18	12123	846	1 4⅝
September, „	11276	23	11299	787	1 4⅜
December, „	17881	16	17897	984	1 1⅝
Half Year ended:—					
June, 1899	25972	118	26090	2079	1 7⅛
	373431	4586	378017	27794	1 5¾

DEPÔT TRADE, &c.

Commencement.

OR HALF YEARS SINCE 1894.

Year or Period ended.	Net Profit.		Net Loss.		Stocks at end.
	Amount.	Rate.	Amount.	Rate.	
Year ended:—	£	s. d.	£	s. d.	£
December, 1886 (2 quarters)	..	..	37	0 2⅛	540
„ 1887	179	0 3½	..	..	596
„ 1888	353	0 5⅝	..	..	1116
„ 1889 (53 weeks)	533	0 6¾	..	..	1929
„ 1890	543	0 5⅝	..	..	3053
„ 1891	488	0 4¼	..	..	2884
„ 1892	681	0 5⅞	..	..	2868
„ 1893	339	0 3½	..	..	2829
„ 1894	702	0 5⅝	..	..	2518
Quarter ended:—					
March, 1895	207	0 6⅞	..	..	3077
June, „	148	0 5⅛	..	..	2956
September, „ (14 weeks)	65	0 1⅞	..	..	3174
December, „	325	0 7½	..	..	3306
March, 1896	48	0 1⅛	..	..	3933
June, „	..	..	41	0 1¼	4112
September, „	138	0 3⅛	..	..	3648
December, „	327	0 6⅜	..	..	3605
March, 1897	..	..	15	0 0⅜	4046
June, „	194	0 3½	..	..	4244
September, „	..	..	5	..	4452
December, „	482	0 7⅞	..	..	4216
March, 1898	42	0 0⅝	..	..	3733
June, „	63	0 1⅛	..	..	3813
September, „	153	0 3⅛	..	..	3670
December, „	725	0 9⅝	..	..	3460
Half Year ended:—					
June, 1899	447	0 4⅛	..	..	3971
	7182	..	98	..	..
Less Loss	98	..			
Leaves Net Profit	7084	0 4½			

MIDDLETON PRESERVE AND

Since

Period.	Net Supplies.	Production.	Expenses.			
			Sundry.	Depreciation.	Interest	Total.
	£	£	£	£	£	£
Quarter ended:—						
September, 1896	18033	32917	3774	371	274	4419
December, „	18990	14695	2284	518	411	3213
March, 1897	19869	16588	2647	529	391	3567
Half Year ended:—						
September, 1897	54803	68974	9681	1167	925	11773
March, 1898	65933	58188	7200	1312	1258	9770
September, „	70623	33466	9670	1491	1330	12491
December, „ (1 quarter)	34499	33452	4524	800	794	6118
June, „	69287	53267	7790	1617	1397	10804
	351537	361547	47570	7805	6780	62155

WEST HARTLEPOOL

Since

Period.	Net Supplies.	Expenses.			
		Sundry.	Depreciation.	Interest.	Total.
Quarter ended:—	£	£	£	£	£
June, 1896 (11 weeks)	6527	327	130	133	590
September, „	8338	341	190	207	738
December, „	13950	436	190	131	757
Half Year ended:—					
June, 1897	30440	1148	380	284	1812
December, „	35435	1768	380	266	2414
June, 1898	35839	994	384	391	1769
December, „	42505	1288	396	401	2085
June, 1899	38842	1579	405	409	2393
	206876	7881	2455	2222	12558

PICKLES WORKS TRADE.

Commencement.

Period.	Rate on Production.		Net Profit on Supplies.		Net Loss on Supplies.		Stocks at end.
	Per cent.	Per £.	Am'nt.	Rate per £.	Am'nt.	Rate per £.	
	£ s. d.	s. d.	£	s. d.	£	s. d.	£
Quarter ended:—							
September, 1896	13 8 5⅞	2 8½	752	0 10	..	..	22618
December, „	21 17 3⅜	4 4⅜	1080	1 1⅝	..	..	17784
March, 1897	21 10 0¾	4 3½	856	0 10¼	..	..	12321
Half Year ended:—							
September, 1897	17 1 4½	3 4⅞	2755	1 0⅛	..	..	49768
March, 1898	16 15 9⅝	3 4¼	1520	0 5⅓	..	..	32437
September, „	14 19 3⅝	2 11⅞	2290	0 7⅝	..	..	52020
December, „ (1 quarter)..	18 5 9¾	3 7⅞	81	0 0⅞	..	..	51611
June, 1899	20 5 7¾	4 0⅝	1922	0 6⅝	..	..	33966
	17 3 9⅞	3 5¼	11256	0 7⅝	..	..	..

LARD REFINERY TRADE.

Commencement.

Period.	Net Profit.		Net Loss.		Stocks at end.
	Amount.	Rate per £.	Amount.	Rate per £.	
Quarter ended:—	£	s. d.	£	s. d.	£
June, 1896 (11 weeks)	..	..	1030	3 1⅜	13468
September, „	..	..	1743	4 2⅛	10105
December, „	1936	2 9½	..	..	6653
Half Year ended:—					
June, 1897	714	0 5⅝	..	..	10012
December, „	1674	0 11¼	..	..	7223
June, 1898	599	0 4	..	..	28578
December, „	718	0 4	..	..	13717
June, 1899	284	0 2	..	..	21267
	5925	..	2773	..	..
Less Loss	2773	..			
Leaves Net Profit	3152	0 3⅝			

DISTRIBUTIVE EXPENSES AND RATE PER CENT ON

	TOTALS.		MANCHESTER GROCERY.	
SALES =	**£11,318,315.**		**£5,348,243.**	
Expenses =	Amount.	Rate per £100.	Amount.	Rate per £100.
	£	d.	£	d.
Wages	116349·80	246·71	31048·01	139·32
Auditors' Fees and Mileages	344·12	·73	162·59	·72
" Deputation Fees	49·07	·10	23·20	·10
" Fares	46·80	·10	22·17	·09
" Deputation Fares	35·71	·08	16·98	·07
Fees and Mileages—General and Branch Committees	3294·12	6·99	977·77	4·38
" " Stocktakers	124·92	·27	13·57	·06
" " Scrutineers	23·82	·05	11·28	·05
" " Deputations	1746·98	3·70	576·10	2·58
Fares and Contracts—General and Branch Committees	1149·62	2·44	299·98	1·34
" " Stocktakers	21·60	·05	7·74	·03
" " Scrutineers	5·65	·01	2·67	·01
" " Deputations	848·07	1·80	284·36	1·27
Price Lists: Printing	2051·52	4·35	910·28	4·30
" Postage	450·11	·95	217·95	·97
Balance Sheets: Printing	421·50	·89	202·61	·90
Printing and Stationery	7649·50	16·22	2500·86	11·22
Periodicals	183·95	·39	77·66	·34
Travelling	11477·90	24·34	1871·78	8·39
Stamps	5557·82	11·79	2530·95	11·35
Telegrams	521·46	1·11	294·29	1·31
Petty Cash	759·88	1·61	336·54	1·51
Advertisements	929·64	1·97	339·25	1·52
Rents, Rates, and Taxes	6761·65	14·34	1497·29	6·71
Coals, Gas, and Water	4778·70	10·13	1126·35	5·05
Oil, Waste, and Tallow	421·38	·89	251·13	1·12
Exhibition and Conference Expenses	944·69	2·00	214·06	·96
Expenses: Quarterly Meetings	770·52	1·63	494·11	2·21
Repairs, Renewals, &c.	6340·01	13·44	1558·65	6·99
Legal	52·33	·11	35·33	·15
Telephones	434·55	·92	157·66	·70
"Annual," 1898	1062·29	2·25	501·78	2·25
"Wheatsheaf" Record Expenses	4744·03	10·06	2241·90	10·06
Employés' Picnic	141·22	·30	21·08	·09
Dining-rooms	8284·04	17·57	3924·13	17·60
Insurance—Fire and Guarantee	3319·86	7·04	457·39	2·05
Depreciation: Land	2579·70	5·47	680·90	3·05
" Buildings	12219·59	25·91	2260·90	10·14
" Fixtures	6737·02	14·29	1803·55	8·09
Interest	41397·38	87·78	11671·02	52·37
Totals	255032·52	540·78	71625·82	321·42
	..	= 2/5/0·7	..	= 1/6/9·4

SALES FOR THE YEAR ENDING DECEMBER 24TH, 1898.

MANCHESTER.

DRAPERY.		WOOLLENS AND READY-MADES.		BOOTS AND SHOES.		FURNISHING.	
£481,136.		**£114,121.**		**£275,366.**		**£251,932.**	
Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.
£	d.	£	d.	£	d.	£	d.
13598·20	678·30	2780·55	584·76	5060·50	441·06	6590·48	627·83
14·64	·73	3·52	·74	8·47	·74	7·63	·73
2·06	·10	·49	·10	1·20	·10	1·09	·10
1·98	·10	·44	·09	1·10	·10	1·04	·10
1·50	·07	·34	·08	·83	·07	·78	·07
156·71	7·82	37·13	7·81	90·00	7·84	81·82	7·80
22·54	1·12	2·20	·46	2·97	·26	4·03	·38
1·01	·05	·23	·05	·57	·05	·53	·06
208·45	10·40	20·26	4·26	38·59	3·36	56·00	5·33
34·51	1·72	8·30	1·74	20·16	1·76	18·07	1·72
2·15	·11	·69	·15	·65	·06	·99	·10
·24	·01	·05	·01	·13	·01	·13	·01
89·37	4·46	8·27	1·74	14·91	1·29	26·00	2·48
32·92	1·64	128·33	26·99	43·75	3·81	28·40	2·71
8·06	·40	7·96	1·67	3·40	·29	22·12	2·11
18·27	·91	4·38	·92	10·53	·92	9·51	·90
790·40	39·42	274·92	57·82	415·04	36·17	337·98	32·20
4·15	·21	2·15	·45	2·75	·24	2·98	·28
1275·51	63·62	1172·03	246·48	348·06	30·34	553·41	52·72
222·41	11·09	53·65	11·28	125·82	10·97	116·93	11·14
8·00	·40	5·76	1·21	2·44	·21	7·21	·69
39·55	1·97	7·25	1·53	26·30	2·29	27·33	2·60
59·20	2·95	18·92	3·98	88·65	7·72	15·19	1·45
766·90	38·25	422·62	88·88	212·93	18·56	404·50	38·53
164·75	8·22	132·30	27·82	70·13	6·11	86·21	8·21
21·90	1·09	14·68	3·09	12·52	1·09	11·28	1·07
70·08	3·50	5·61	1·18	38·03	3·31	12·63	1·20
45·12	2·26	10·92	2·30	25·94	2·26	23·19	2·21
450·45	22·47	91·97	19·34	232·97	20·30	156·69	14·93
1·08	·05	·20	·04	·58	·05	·55	·05
12·90	·64	2·63	·55	13·47	1·17	11·57	1·10
45·30	2·25	11·15	2·35	26·64	2·32	23·40	2·23
202·81	10·12	48·07	10·11	116·78	10·18	104·45	9·95
16·34	·81	4·30	·90	6·23	·58	12·90	1·23
845·22	42·18	195·76	41·17	479·14	41·76	441·95	42·10
459·40	22·94	103·57	21·78	234·94	20·48	145·77	13·89
457·08	22·80	15·64	3·29	172·39	15·02	331·76	31·60
1457·65	72·71	170·68	35·89	571·71	49·83	1070·66	102·00
275·19	13·72	61·58	12·95	428·15	37·32	341·07	32·49
5439·50	271·33	1009·12	212·22	2731·09	238·03	1890·71	180·12
27323·50	1362·94	6838·62	1438·18	11680·46	1018·03	12978·94	1236·42
	=		=		=		=
..	**5/13/6·9**	.. ..	**5/19/10·1**	..	**4/4/10**	..	**5/3/0·4**

DISTRIBUTIVE EXPENSES AND RATE PER CENT ON

NEWCASTLE.

	GROCERY.		DRAPERY.		BOOTS & SHOES.	
SALES =	**£2,108,434.**		**£403,876.**		**£164,761.**	
Expenses =	Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.
	£	d.	£	d.	£	d.
Wages	16638·30	189·38	6244·33	371·06	2385·58	347·49
Auditors' Fees and Mileages	64·08	·73	12·26	·73	5·02	·73
" Deputation Fees	9·13	·11	1·75	·10	·72	·11
" Fares	8·69	·10	1·59	·10	·67	·10
" Deputation Fares	6·67	·08	1·25	·07	·52	·08
Fees and Mileages—General & Branch Committees	707·53	8·05	164·59	9·78	67·53	9·84
" " Stocktakers	15·74	·18	7·16	·43	2·55	·37
" " Scrutineers	4·44	·05	·84	·05	·34	·05
" " Deputations	226·89	2·58	72·80	4·33	19·54	2·85
Fares & Contracts—General & Branch Committees	274·00	3·12	58·64	3·48	24·10	3·51
" " Stocktakers	·50	·01	·27	·02	·16	·02
" " Scrutineers	1·05	·01	·21	·01	·08	·01
" " Deputations	76·60	·87	26·24	1·56	6·36	·93
Price Lists: Printing	134·15	1·53	3·00	·18	17·52	2·55
" Postage	47·81	·55	..	..	·27	·04
Balance Sheets: Printing	51·22	·58	9·82	·58	4·02	·59
Printing and Stationery	691·52	7·87	230·90	13·72	154·61	22·52
Periodicals	30·91	·35	5·56	·33	2·56	·37
Travelling	852·96	9·71	995·92	59·18	284·02	41·37
Stamps	785·42	8·94	122·89	7·30	51·16	7·45
Telegrams	168·95	1·92	4·00	·24	4·00	·58
Petty Cash	202·15	2·30	27·66	1·64	11·16	1·63
Advertisements	146·41	1·67	28·83	1·71	12·88	1·88
Rents, Rates, and Taxes	754·96	8·59	421·37	25·04	246·12	35·85
Coals, Gas, and Water	1282·39	14·60	376·85	22·40	94·26	13·73
Oil, Waste, and Tallow	48·62	·55	8·99	·53	3·68	·54
Exhibition and Conference Expenses	260·09	2·96	50·10	2·98	20·05	2 92
Expenses: Quarterly Meetings	53·07	·60	10·18	·61	4·11	·60
Repairs, Renewals, &c	601·87	6·85	222·26	13·21	53·07	7·73
Legal	4·99	·06	·86	·05	·38	·05
Telephones	118·40	1·35	22·40	1·33	9·16	1·33
"Annual," 1898	197·57	2·25	37·88	2·25	15·60	2·27
"Wheatsheaf" Record Expenses	884·06	10·06	168·93	10·04	68·79	10·02
Employés' Picnic	15·15	·17	13·25	·79	3·80	·55
Dining-rooms	897·08	10·21	244·14	14·51	100·00	14·57
Insurance—Fire and Guarantee	278·19	3·17	264·60	15·72	117·93	17·17
Depreciation: Land	236·65	2·69	125·34	7·45	72·05	10·49
" Buildings	1387·40	15·79	757·99	45·04	437·87	63·78
" Fixtures	656·23	7·47	753·89	44·80	438·12	63·82
Interest	4787·17	54·50	3015·20	179·17	1281·65	186·70
Totals	33609·01	382·56	14514·74	862·52	6022·01	877·19
	..	1/11/10·5	..	3/11/10·5	..	3/13/1·1

SALES FOR THE YEAR ENDING DECEMBER 28TH, 1898.

NEWCASTLE.		LONDON.							
FURNISHING.		GROCERY.		DRAPERY.		BOOTS & SHOES		FURNISHING.	
£170,410.		£1,726,505.		£141,046.		£64,342.		£68,143.	
Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.
£	d.	£	d.	£	d.	£	d.	£	d.
4307·32	606·63	17099·60	237·70	5357·45	911·60	2069·22	771·83	3170·24	1116·56
5·14	·72	52·50	·72	4·26	·73	1·95	·73	2·08	·73
·75	·11	7·51	·10	·60	·10	·28	·11	·29	·10
·71	·10	7·25	·10	·59	·10	·27	·10	·29	·10
·54	·08	5·49	·08	·42	·07	·19	·07	·20	·07
68·82	9·69	692·58	9·62	190·23	32·37	28·77	10·73	30·66	10·80
6·48	·91	25·79	·36	11·39	1·94	3·43	1·28	7·09	2·49
·35	·05	3·65	·05	·29	·04	·14	·05	·14	·05
13·27	1·87	390·03	5·42	68·59	11·67	27·27	10·18	29·19	10·28
24·60	3·47	319·23	4·43	46·07	7·84	10·52	3·92	11·45	4·03
·20	·03	7·82	·11	·23	·04	·05	·02	·15	·05
·09	·01	·86	·01	·07	·01	·03	·01	·03	·02
8·38	1·18	221·62	3·08	43·66	7·44	13·15	4·90	29·13	10·26
14·07	1·98	382·07	5·31	356·85	60·72	·08	·03	·08	·03
·53	·08	140·42	1·95	..	..	·81	·30	·78	·27
4·12	·58	92·42	1·29	7·54	1·28	3·42	1·28	3·65	1·29
180·94	25·48	1425·30	19·81	360·66	61·37	114·88	42·85	171·52	60·41
2·36	·33	48·24	·67	2·73	·46	1·05	·39	·85	·30
274·28	38·63	1486·15	20·66	1299·80	221·17	384 99	143·60	679·00	239·14
129·19	18·19	1176·02	16·35	131·24	22·33	49·90	18·63	62·23	21·92
4·00	·56	19·22	·26	1·88	·32	·81	·30	·89	·31
16·67	2·35	51·50	·71	8·32	1·41	1·69	·63	3·76	1·32
11·73	1·65	164·32	2·28	11·21	1·91	23·55	8·78	9·50	3·35
547·38	77·09	978·25	13·60	225·89	38·44	94·84	35·38	188·58	66·42
95·31	13·42	1053·45	14·64	148·64	25·29	66·12	24·66	81·93	28·86
3·60	·51	35·74	·50	4·76	·81	2·18	·81	2·32	·82
20·43	2·88	179·01	2·54	29·12	4·96	32·72	12·20	12·77	4·50
4·17	·58	86·88	1·21	6·71	1·14	2·92	1·09	3·20	1·13
103·17	14·53	1938·10	26·94	584·73	99·50	178·25	66·49	167·83	59·11
·41	·06	7·36	·10	·30	·05	·14	·05	·15	·05
9·42	1·33	52·62	·73	6·93	1·18	9·11	3·40	8·27	2·91
15·62	2·20	161·95	2·25	13·06	2·22	5·98	2·23	6·37	2·24
70·36	9·91	722·84	10·05	59·49	10·12	26·75	9·98	28·81	10·15
1·89	·27	31·52	·44	7·58	1·30	2·99	1·12	4·18	1·47
104·40	14·70	701·48	9·75	181·34	30·86	81·93	30·56	87·47	30·81
135·50	19·08	491·35	6·83	357·17	60·78	160·18	59·74	113·86	40·10
157·27	22·15	178·82	2·49	62·08	10·56	26·10	9·74	63·62	22·41
962·32	135·53	1935·85	26·91	648·36	110·32	277·77	103·61	280·43	98·77
313·82	44·20	1099·56	15·28	347·39	59·11	149·79	55·87	68·66	24·18
1591·30	224·11	5217·92	72·53	1520·82	258·78	687·97	256·62	553·93	195·09
						..	..	..	..
9210·91	1297·23	38692·29	537·86	12108·45	2060·34	4542·19	1694·27	5885·58	2072·90
	=		=		=		=		=
..	5/8/1·2	..	2/4/9·8	..	8/11/8·3	..	7/1/2·2	..	8/12/8·9

The Co-operative Union Limited.

OFFICES: LONG MILLGATE, MANCHESTER.

WHAT IS THE CO-OPERATIVE UNION?

IT is an institution charged with the duty of keeping alive and diffusing a knowledge of the principles which form the life of the Co-operative movement, and giving to its active members, by advice and instruction—literary, legal, or commercial—the help they may require, that they may be better able to discharge the important work they have to do.

WHAT HAS IT DONE?

THE greater part of the legal advantages enjoyed by Co-operators originated in the action of the Central Board of the Union, and the Central Committee which it succeeded. They may be summarised as follows:—

(1) The right to deal with the public instead of their own members only.
(2) The incorporation of the Societies, by which they have acquired the right of holding in their own name lands or buildings and property generally, and of suing and being sued in their own names, instead of being driven to employ trustees.
(3) The power to hold £200 instead of £100 by individual members of our Societies.
(4) The limitation of the liability of members for the debts of the Society to the sum unpaid upon the shares standing to their credit.
(5) The exemption of Societies from charge to income tax on the profits of their business, under the condition that the number of their shares shall not be limited.
(6) The authorising one Registered Society to hold shares in its own corporate name to any amount in the capital of another Registered Society.
(7) The extension of the power of members of Societies to bequeath shares by nomination in a book, without the formality of a will or the necessity of appointing executors, first from £30 to £50, and now to £100, by the Provident Nominations and Small Intestacies Act, 1883, which also makes this power apply to loans and deposits as well as to shares.
(8) The Industrial and Provident Societies Act, 1871, which enables Societies to hold and deal with land freely.
(9) The Industrial and Provident Societies Act, 1876, which consolidated into one Act the laws relating to these Societies, and, among many smaller advantages too numerous to be mentioned in detail, gave them the right of carrying on banking business whenever they offer to the depositors the security of transferable share capital.
(10) The Industrial and Provident Societies Act, 1893.

The Union consists of Industrial and Provident Societies, Joint-Stock Companies, and other bodies corporate.

No Society is admitted into Union unless its management is of a representative character, nor unless it agree—

(1) To accept the statement of principles in the rules of the Union as the rules by which it shall be guided in all its own business transactions.
(2) To contribute to the fund called the Congress Fund the annual payment following:—
    (*a*) If the number of members of any such Society is less than 1,000, then the sum of 2d. for each member.
    (*b*) If the number of such members exceeds 1,000, then, at least, the sum of 2,000d.

In estimating the number of members of a Society comprising other Societies, each such Society is considered to be one member.

The subscription is considered due, 1d. in the first and 1d. in the third quarter of each year, but may be wholly paid in the first quarter.

The financial year commences on January 1st in each year, and ends on December 31st following.

N.B.—Secretaries forwarding Cheques on account of the Union are requested to make them payable to the Co-operative Union Limited; Money Orders to A. WHITEHEAD, Cashier.

SUMMARY OF THE LAW RELATING TO SOCIETIES

UNDER THE

INDUSTRIAL AND PROVIDENT SOCIETIES ACT, 1893.

I. The Formation of Societies—

1. Application must be made to the Registrar of Friendly Societies, in London, Edinburgh, or Dublin, according to the case, on a form supplied by the office, signed by seven persons and the secretary, accompanied by two copies of the rules, signed by the same persons.

2. These rules must provide for twenty matters stated on the form of application.

3. No fees charged on the registration of a society.

N.B.—Model rules on these twenty matters can be obtained from the Registrar's office; and the CO-OPERATIVE UNION LIMITED, LONG MILLGATE, MANCHESTER, publishes, at the cost of 1½d. a copy, general rules, approved of by the Chief Registrar, providing also for many other matters on which rules are useful; and capable of being adopted, either with or without alterations, by a few special rules, with a great saving in the cost of printing.

The General Secretary of the Union will prepare such special rules, without charge, on receiving a statement of the rules desired.

II. Rights of a Registered Society—

1. It becomes a body corporate, which can by its corporate name sue and be sued, and hold and deal with property of any kind, including shares in other societies or companies, and land to any amount.

2. Its rules are binding upon its members, though they may have signed no assent to them; but may be altered by amendments duly made as the rules provide, and registered, for which a fee of 10s. is charged. The application for registration must be made on a form supplied by the Registrar's office.

3. It can sue its own members, and can make contracts, either under its seal or by a writing signed by any person authorised to sign, or by word of mouth of any person authorised to speak for it, which will be binding wherever a contract similarly made by an individual would bind him.

4. It may make all or any of its shares either transferable or withdrawable, and may carry on any trade, including the buying and selling of land, and banking under certain conditions, and may apply the profits of the business in any manner determined by its rules; and, if authorised by its rules, may receive money on loan, either from its members or others, to any amount so authorised.

5. If it has any withdrawable share capital it may not carry on banking, but may take deposits, within any limits fixed by its rules, in sums not exceeding 10s. in any one payment, or £20 for any one depositor, payable at not less than two clear days' notice.

6. It may make loans to its members on real or personal security; and may invest on the security of other societies or companies, or in any except those where liability is unlimited.

7. It may make provision in its rules for the settlement of disputes between members and the Society or any officer thereof, and any decision given in accordance with the conditions stated in the rules is binding on all parties to the dispute, and is not removable into any court of law.

8. If the number of its shares is not limited either by its rules or its practice, it is not chargeable with income tax on the profits of its business.

9. It can, in the way provided by the Act, amalgamate with or take over the business of any other society, or convert itself into a company.

10. It can determine the way in which disputes between the society and its officers or members shall be settled.

11. It can dissolve itself, either by an instrument of dissolution signed by three-fourths of its members, or by a resolution passed by a three-fourths vote at a special general meeting, of which there are two forms—(A) purely voluntary, when the resolution requires confirmation at a second meeting; (B) on account of debts, when one meeting is sufficient. In such a winding up hostile proceedings to seize the property can be stayed.

III. Rights of Members (see also *IV.*, 4, 5, 6)—

1. They cannot be sued individually for the debts of the society, nor compelled to pay more towards them than the sum remaining unpaid on any shares which they have either expressly agreed to take or treated as their property, or which the rules authorise to be so treated.

2. If they transfer or withdraw their shares, they cannot be made liable for any debts contracted subsequently, nor for those subsisting at the time of the transfer or withdrawal, unless the other assets are insufficient to pay them.

3. Persons not under the age of 16 years may become members, and legally do any acts which they could do if of full age, except holding any office.

4. An individual or company may hold any number of shares allowed by the rules, not exceeding the nominal value of £200, and any amount so allowed as a loan. A society may hold any number of shares.

5. A member who holds at his death not more than £100 in the society as shares, loans, or deposits, may, by a writing recorded by it, nominate, or vary or revoke the nomination of any persons to take this investment at his death; and if he dies intestate, without having made any subsisting nomination, the committee of management of the society are charged with the administration of the fund; subject in either case to a notice to be given to the Commissioners of Inland Revenue whenever the sum so dealt with exceeds £80.

6. The members may obtain an inquiry into the position of the society by application to the Registrar.

IV. Duties of a Registered Society—

1. It must have a registered office, and keep its name painted or engraved outside, and give due notice of any change to the Registrar.

2. It must have a seal on which its name is engraved.

3. It must have its accounts audited at least once a year, and keep a copy of its last balance sheet and the auditors' report constantly hung up in its registered office.

4. It must make to the Registrar, before the 31st of March in every year, a return of its business during the year ending the 31st December previous, and supply a copy of its last returns gratis to every member and person interested in its funds on application.

5. It must allow any member or person interested in its funds to inspect his own account and the book containing the names of the members.

6. It must supply a copy of its rules to every person on demand, at a price not exceeding one shilling.

7. If it carries on banking, it must make out in February and August in every year, and keep hung up in its registered office, a return, in a form prescribed by the Act; and it has also to make a return every February to the Stamp Office under the Banking Act.

The non-observance by a society of these duties exposes it and its officers to penalties varing from £1 to £50, which are in some cases cumulative for every week during which the neglect lasts.

THE

SCOTTISH

CO-OPERATIVE WHOLESALE SOCIETY

LIMITED.

PLATES, ADVERTISEMENTS, STATISTICS, &c.,

PAGES 93 TO 142.

SCOTTISH CO-OPERATIVE
WHOLESALE SOCIETY LIMITED.

Enrolled 20th April, 1868, under the provisions of the Industrial and Provident Societies Act, 20th August, 1867, 30 and 31 Vict., cap. 117, sec. 4.

Business Commenced 8th September, 1868.

REGISTERED OFFICE, FURNITURE, & STATIONERY WAREHOUSE:
MORRISON STREET, GLASGOW.

GROCERY AND PROVISION WAREHOUSE:
PAISLEY ROAD, GLASGOW.

DRAPERY WAREHOUSE:
DUNDAS AND ST. JAMES' STREETS, GLASGOW.

BOOT AND SHOE WAREHOUSE:
PATERSON AND ST. JAMES' STREETS, GLASGOW.

SHIRT FACTORY, TAILORING FACTORY, WATERPROOF FACTORY, AERATED WATER FACTORY, AND CARTWRIGHT DEPT.:
PATERSON STREET, GLASGOW.

MANTLE FACTORY:
DUNDAS STREET, GLASGOW.

BOOT AND SHOE FACTORY, CLOTHING FACTORIES, CABINET AND BRUSH FACTORIES, PRINTING WORKSHOP, PRESERVE AND CONFECTION WORKS, COFFEE ESSENCE WORKS, TOBACCO FACTORY, AND PICKLE WORKS:
SHIELDHALL, NEAR GOVAN, GLASGOW.

INTRODUCTION.

AGAIN we have the pleasure of placing before our readers the record of an exceptionally prosperous year's trade. The past year has been one of unbroken progress in the Co-operative world, and the statistical tables contained in the Wholesale Societies' "Annual" for 1900 should be exceedingly gratifying as well as interesting to all well-wishers of the movement. They are in themselves a sufficient demonstration of the futility of the efforts made to check the onward march of Co-operation, and should be most encouraging to all who have been labouring faithfully and earnestly for the cause they have at heart.

While the industries commenced during the year may not be of first-class importance they are, nevertheless, evidence of expansion in new directions, and show a careful consideration of the daily wants of our great constituency. The Creamery at Bladnoch has been for some time in full working order manufacturing goods of high quality, and the latest addition—the Fish-curing Station, recently opened in Aberdeen—has already been found too small for the demands made upon it.

The same remark applies to almost all the Productive Works of the Society, and it has been a severe tax on the energies of the Committee to provide the accommodation and make the extensions necessitated by such a very large increase in trade.

In view of these facts it may be considered that we have good grounds for mutual congratulation, but all Co-operators would do well to remember that the continued success of the Wholesale Society depends entirely on the consistent and loyal support of every individual member of the Federation.

We would also commend for your perusal the general articles included in this volume. They are the work of writers who have full and practical knowledge of the subjects treated, and should prove at once interesting and instructive.

SCOTTISH

CO-OPERATIVE WHOLESALE SOCIETY

LIMITED.

Branches:

LINKS PLACE, LEITH.
GRANGE PLACE, KILMARNOCK.
TRADES LANE, DUNDEE.
HENRY STREET, ENNISKILLEN, IRELAND.

FURNITURE WAREHOUSE, DRAPERY & BOOT SAMPLE ROOM, CHAMBERS STREET, EDINBURGH.
CHANCELOT ROLLER FLOUR MILLS, BONNINGTON, EDINBURGH.
SOAP WORKS, GRANGEMOUTH.
ETTRICK TWEED MILLS, SELKIRK.
JUNCTION FLOUR AND OATMEAL MILLS, LEITH.

CREAMERIES:
ENNISKILLEN, BELNALECK, GOLA, FLORENCE COURT, S. BRIDGE, GARDNER'S CROSS, IRELAND; BLADNOCH, WIGTOWNSHIRE, N.B.

FISH-CURING WORKS, ABERDEEN.

TEA AND COFFEE DEPARTMENT:
LEMAN STREET, LONDON, E.

Bankers:
THE UNION BANK OF SCOTLAND LIMITED.

Head Offices:

GLASGOW:	LONDON:	EDINBURGH:
INGRAM STREET.	62, CORNHILL, E.C.	GEORGE STREET.
General Manager:	**Manager:**	**Manager:**
ROBERT BLYTH.	JOHN A. FRADGLEY.	HENRY HAY NORIE.

Registered Offices and Furniture Warehouse, 95 Morrison Street, Glasgow.

Grocery and Provision Warehouse, 119 Paisley Road, Glasgow.

Glasgow Drapery and Boot and Shoe Warehouses, Dundas Street

Glasgow Grocery and Provision Warehouse and Hall, Clarence Street.

LEITH GROCERY AND PROVISION WAREHOUSE, LINKS PLACE.

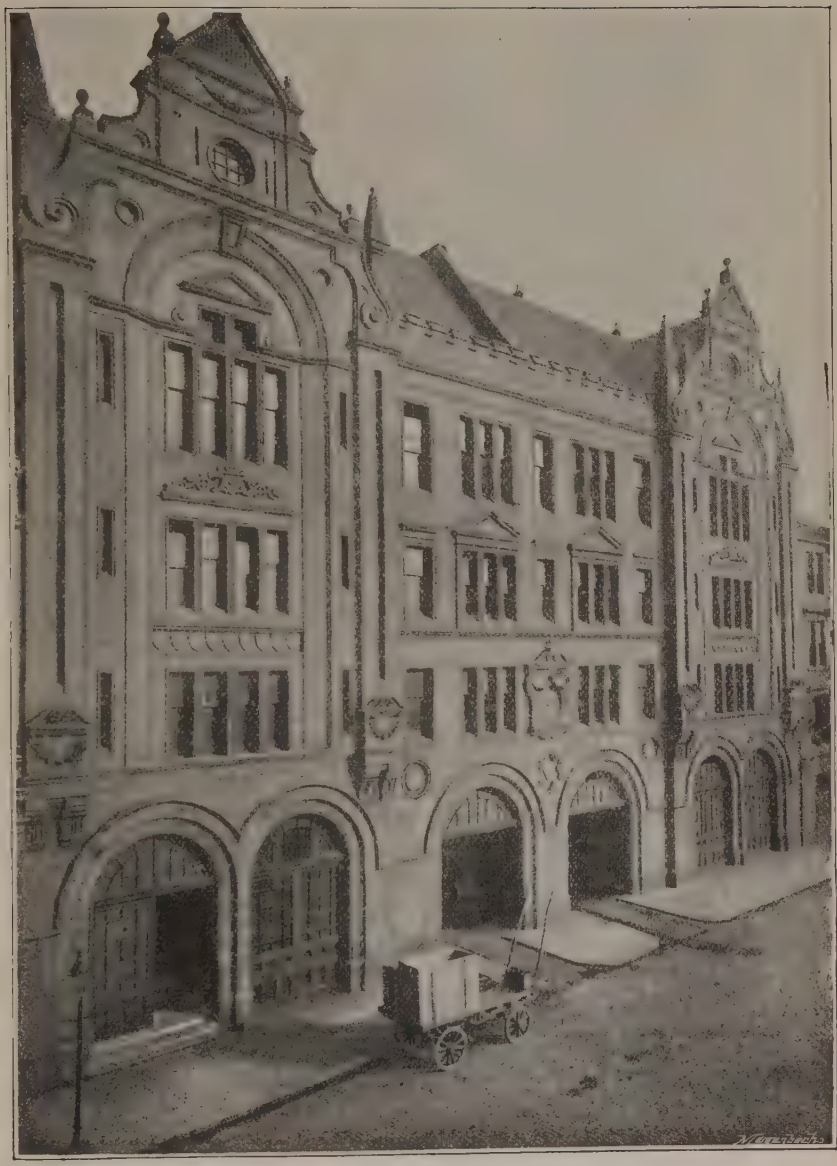
THIRTY-ONE YEARS' WHOLESALE DISTRIBUTION IN SCOTLAND.

SCOTTISH Co-operative Wholesale Society Ltd.

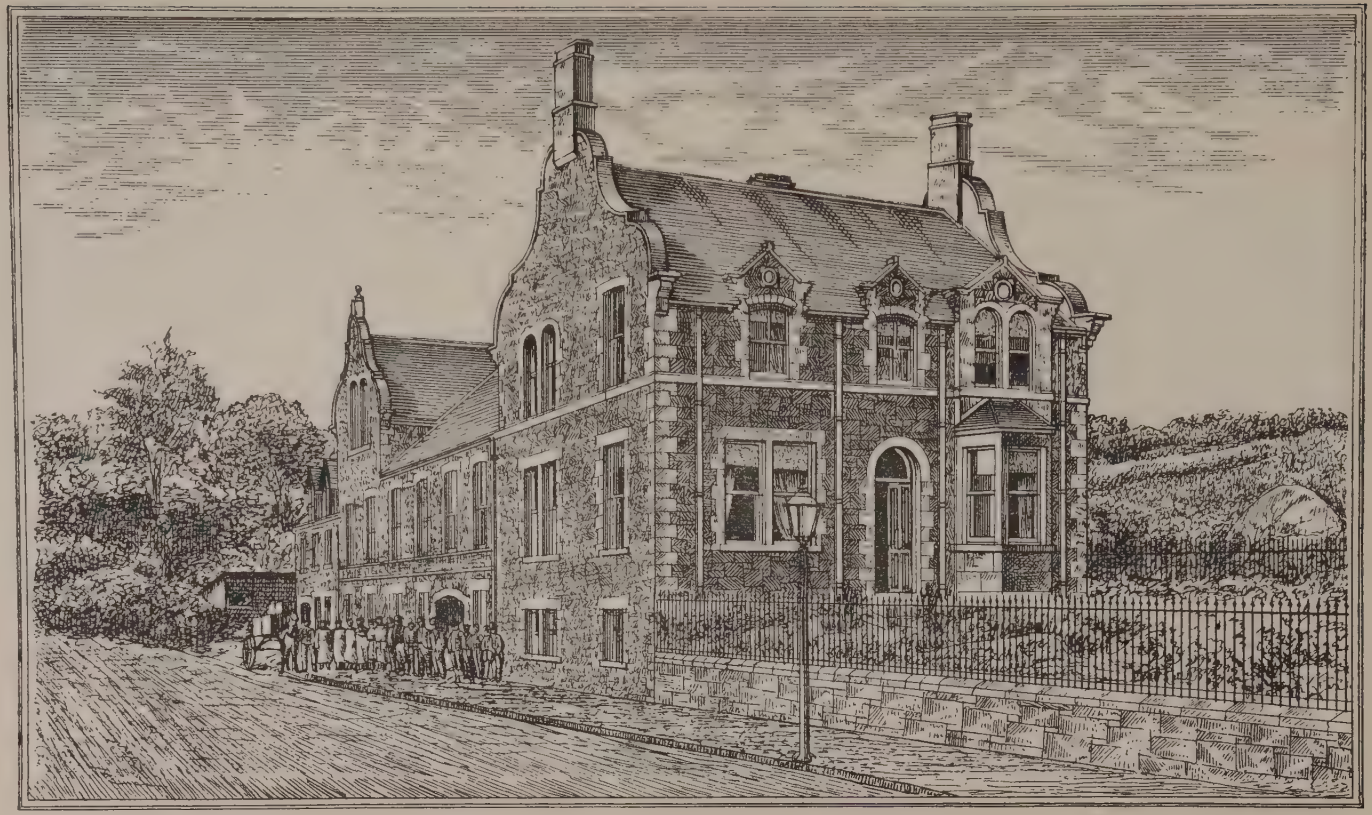
YEARS.	CAPITAL.	SALES.	PROFITS.	YEARS.
1868, 13 weeks	£1,795	£9,697	£48	13 weeks, 1868
1869, 52 „	5,175	81,094	1,304	52 „ 1869
1870, 50 „	12,543	105,249	2,419	50 „ 1870
1871, 52 „	18,009	162,658	4,131	52 „ 1871
1872, 52 „	30,931	262,530	5,435	52 „ 1872
1873, 52 „	50,433	384,489	7,446	52 „ 1873
1874, 52 „	48,982	409,947	7,553	52 „ 1874
1875, 52 „	56,751	430,169	8,233	52 „ 1875
1876, 51 „	67,219	457,529	8,836	51 „ 1876
1877, 52 „	72,568	589,221	10,925	52 „ 1877
1878, 52 „	83,174	600,590	11,969	52 „ 1878
1879, 52 „	93,077	630,097	14,989	52 „ 1879
1880, 52 „	110,179	845,221	21,685	52 „ 1880
1881, 54 „	135,713	986,646	23,981	54 „ 1881
1882, 52 „	169,429	1,100,588	23,220	52 „ 1882
1883, 52 „	195,396	1,253,154	28,366	52 „ 1883
1884, 52 „	244,186	1,300,331	29,435	52 „ 1884
1885, 52 „	288,946	1,438,220	39,641	52 „ 1885
1886, 60 „	333,653	1,857,152	50,398	60 „ 1886
1887, 53 „	367,309	1,810,015	47,278	53 „ 1887
1888, 52 „	409,668	1,963,853	53,538	52 „ 1888
1889, 52 „	480,622	2,273,782	61,756	52 „ 1889
1890, 52 „	575,322	2,475,601	76,545	52 „ 1890
1891, 52 „	671,108	2,828,036	89,090	52 „ 1891
1892, 53 „	778,494	3,104,768	96,027	53 „ 1892
1893, 52 „	869,756	3,135,562	89,116	52 „ 1893
1894, 52 „	940,835	3,056,582	88,452	52 „ 1894
1895, 52 „	1,134,269	3,449,461	132,374	52 „ 1895
1896, 52 „	1,237,317	3,822,580	174,982	52 „ 1896
1897, 52 „	1,286,624	4,405,854	156,341	52 „ 1897
1898, 53 „	1,333,078	4,692,330	165,580	53 „ 1898
1899, 26 „	1,422,452	2,400,834	101,582	26 „ 1899
TOTALS.	1,422,452	52,323,855	1,632,681	TOTALS.

COMMENCED SEPTEMBER, 1868.

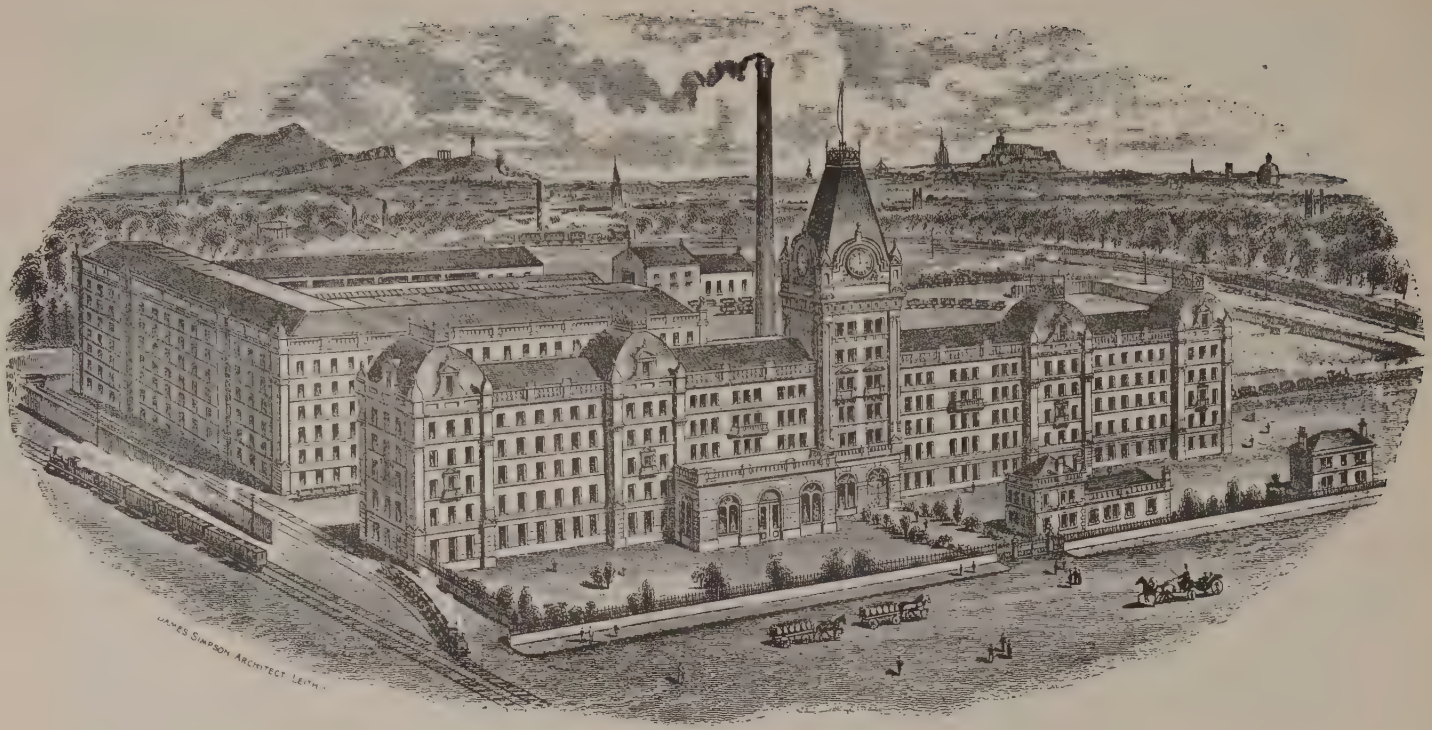
KILMARNOCK GROCERY AND PROVISION WAREHOUSE, GRANGE PLACE.



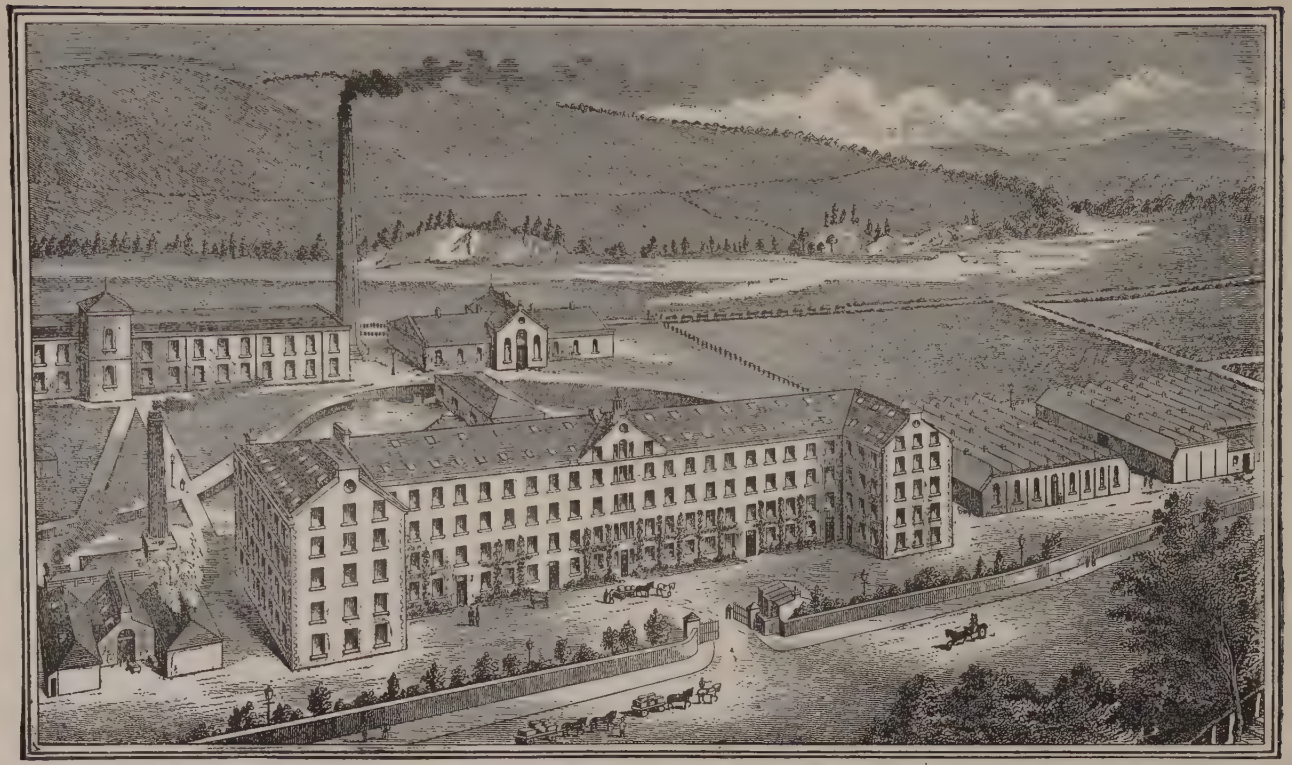
GROCERY, ETC., CROOKSTON STREET, GLASGOW.



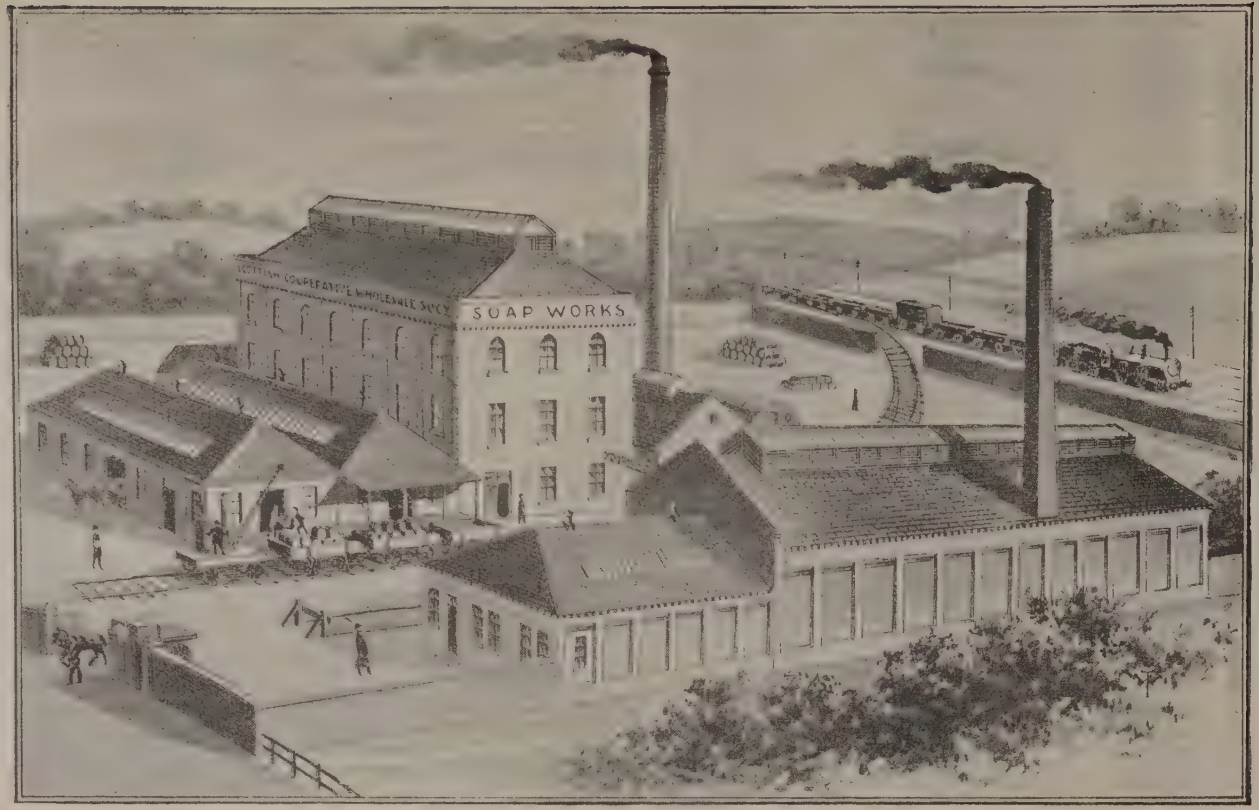
Enniskillen Depot—Butter, Eggs, and Bacon.



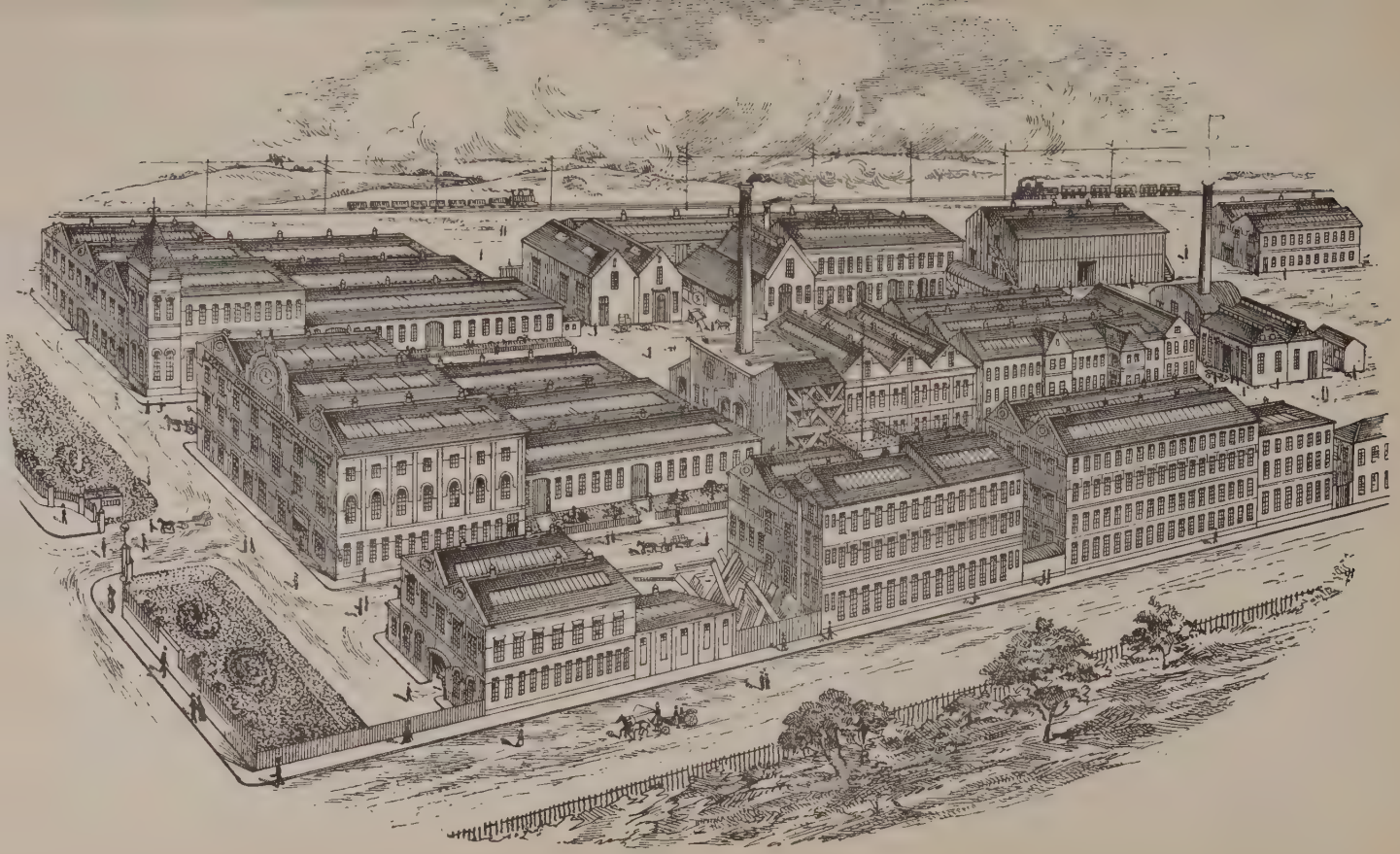
·CHANCELOT·ROLLER·FLOUR·MILLS,·EDINBURGH.·1891·



ETTRICK TWEED MILLS, SELKIRK.



Soap Works, Grangemouth.



PRODUCTIVE WORKS, SHIELDHALL, GOVAN, NEAR GLASGOW.

General Committee.

President:

Mr. WILLIAM MAXWELL, Caerlaverock, Polmont Station.

Secretary:

Mr. ANDREW MILLER, Haldane Cottage, Balcarres Street, Tillicoultry.

Directors:

Mr. DANIEL THOMSON .. Rolland House, Rolland Street, Dunfermline.
Mr. JOHN PEARSON..... Fenton Street, Alloa.
Mr. ISAAC Mc.DONALD .. 7, Knoxland Street, Dumbarton.
Mr. JOHN ARTHUR ..... 39, High Street, Paisley.
Mr. T. C. Mc.NAB..... 25, Dalmeny Street, Leith.
Mr. HENRY MURPHY.... Clydeview Villa, Lanark.
Mr. JOHN STEVENSON .. 5, W. Fullarton Street, Kilmarnock.
Mr. PETER GLASSE..... 296, St. George's Road, Glasgow.
Mr. THOMAS LITTLE .... 264, Scott Street, Galashiels.
Mr. ROBERT STEWART .. 15, Rutland Crescent, Paisley Rd. W., Glasgow.

Sub-Committees:

(1) Finance and Property—

Messrs. LITTLE, Mc.NAB, THOMSON, and GLASSE.

Mr. Little, Convener Finance. Mr. Mc.Nab, Convener Property.

(2) Grocery: Distributive and Productive—

Messrs. PEARSON, ARTHUR, MAXWELL, and STEWART.

Mr. Pearson, Convener Distributive. Mr. Arthur, Convener Productive.

(3) Drapery and Furnishing: Distributive and Productive—

Messrs. MILLER, STEVENSON, MURPHY, and Mc.DONALD.

Mr. Stevenson, Convener Distributive. Mr. Miller, Convener Productive.

Auditors:

Mr. JNO. ALEXANDER, P.A., Paisley. | Mr. JNO. MILLEN, Rutherglen.
Mr. ROBT. J. SMITH, C.A., Glasgow.

Officers of the Society.

Manager: Mr. JAMES MARSHALL, Glasgow. **Accountant:** Mr. ROBERT MACINTOSH, Glasgow. **Cashier:** Mr. ALLAN GRAY, Glasgow.

Buyers, &c.:

Grocery and Provisions	Glasgow	Mr. E. ROSS.
" "	"	Mr. JOHN Mc.DONALD.
" "	"	Mr. JOHN JAMIESON.
" "	Leith	Mr. PETER ROBERTSON.
" "	"	Mr. WILLIAM Mc.LAREN.
" "	Kilmarnock	Mr. WILLIAM LAIRD.
" "	"	Mr. DAVID CALDWELL.
" "	Dundee	Mr. JOHN BARROWMAN.
Potato Department	Glasgow	Mr. JOHN Mc.INTYRE.
" "	Leith	Mr. JOHN WHITE.
Cattle	Glasgow	Mr. WILLIAM DUNCAN.
Provisions	Enniskillen	Mr. WILLIAM WHYTE.
Preserve Works	Glasgow	Mr. N. ANDERSON.
Tobacco Factory	"	Mr. THOMAS HARKNESS.
Chancelot and Junction Flour Mills	Edinburgh	Mr. WM. F. STEWART.
	" Master Miller	Mr. SYLVANUS WEAR.
Soap Works	Grangemouth	Mr. T. B. BOLTON.
Farm	Larbert	Mr. ROBERT DEMPSTER.
Tea Department	London	Mr. CHARLES FIELDING.
Printing & Stationery Department	Glasgow	Mr. DAVID CAMPBELL.
Drapery Department	"	Mr. DAVID GARDINER.
" " Assistant	"	Mr. GAVIN NEISH.
Furniture Department and Cabinet Works	"	Mr. WILLIAM MILLER.
	Edinburgh	Mr. GEO. D. LAWSON.
Boot and Shoe Department and Factory	Glasgow	Mr. ALBERT JOHNSON.
Ettrick Tweed & Blanket Mills	Selkirk	Mr. ANDREW WESTLAND.
Clerk of Works	Glasgow	Mr. JAMES DAVIDSON.
Mechanics' Department	"	Mr. JAMES COATS.
Carting Superintendent	"	Mr. JAMES CALDWELL.

Travellers:

Grocery Department	Glasgow	Mr. GEO. BLACKWOOD.
" "	"	Mr. JOHN KNOX.
" "	Leith	Mr. A. STODDART.
Tobacco	Glasgow	Mr. JOHN ROSS.
Flour Mills	Edinburgh	Mr. GEORGE FISHER.
Drapery Department	Glasgow	Mr. J. D. STEWART.
" "	"	Mr. JAMES HENRY.
" "	"	Mr. JOHN BOWMAN.
" "	"	Mr. ROBERT WOOD.
" "	Edinburgh	Mr. GEORGE TAIT.
Ettrick Mills	Glasgow	Mr. JAMES ALLAN.
Furniture Department	"	Mr. GEORGE CARSON.
" "	"	Mr. WM. H. TOD.
Boot and Shoe Department	"	Mr. G. W. ROSS.
" "	"	Mr. J. J. HORN.
Coal Department	"	Mr. T. BURTON.
Soap Works	Grangemouth	Mr. WM. Mc.FARLANE.

Business Arrangements.

Registered Office:

MORRISON STREET, GLASGOW.

Branches:

LINKS PLACE, LEITH; GRANGE PLACE, KILMARNOCK

TRADES LANE, DUNDEE;

HENRY STREET, ENNISKILLEN, IRELAND;

LEMAN STREET, LONDON, E.

BUSINESS ARRANGEMENTS.

Societies, to which our trade is strictly confined, desirous of opening an account with this Society, should forward a copy of their registered Rules and latest balance sheet; or, if but recently started, a statement showing the number of members, value of shares, amount subscribed for and paid up, weekly turnover expected, and the amount of credit allowed, if any, per member in proportion to the capital paid up. Should these particulars be considered satisfactory, goods will be supplied on the following terms:—The maximum credit allowed is fourteen days, and interest is charged quarterly on all in excess of this allowance at the rate of 2½ per cent per annum, but in cases where the debt exceeds one month's purchases 5 per cent is charged.

The Directors, by authority of the general meeting, are empowered to have the books of defaulting societies examined, and to take the necessary steps to protect the other members of the federation.

Orders for goods should bear the price or brand of the article wanted, the mode of transit, and name of station to which the goods are to be sent. Orders for the different departments should be on separate slips. Goods not approved of must be returned at once and intact. No claim for breakage, short weight, &c., can be entertained unless made within six days after goods are received. Delay in delivery should be at once advised.

WEEKLY STATEMENT OF ACCOUNT.

5TH WEEK.
73RD QUARTER.

LEDGER FOLIO, 929.
119, PAISLEY ROAD,
GLASGOW, *September 3rd, 1887.*

The Grahamston and Bainsford Co-operative Society Limited.

Dr. To The Scottish Co-operative Wholesale Society Limited. Cr.

GOODS.						CASH AND CREDITS.								
Date.	Amount of each Invoice.			Balance last Statement.		Date.	Cash.			Credit.			Totals.		
	£	s.	d.	£	s. d.		£	s.	d.	£	s.	d.	£	s.	d.
				698	7 2										
Aug. 30..	0	4	3	....		Aug. 30..	....			0	5	0	....		
„ 30..	18	11	7	....		„ 31..	....			1	0	0	....		
„ 30..	29	0	8	....		„ 31..	....			0	12	9	....		
„ 30..	32	4	0	....		„ 31..	....			0	12	10	....		
„ 30..	0	17	7	....		Sept. 1..	....			0	5	6	....		
„ 30..	4	10	0	....		„ 1..	....			0	1	0	....		
„ 30..	4	4	0	....		„ 1..	....			1	3	6	....		
„ 30..	3	2	6	....		„ 1..	....			2	7	0	....		
„ 31..	0	6	6	....		„ 2..	....			0	12	9	....		
„ 31..	0	8	3	....		„ 2..	....			0	12	9	....		
„ 31..	0	10	10	....		„ 2..	....			0	14	9	....		
„ 31..	0	8	3	....		„ 2..	....			0	10	0	....		
„ 31..	1	5	0	....		„ 3..	....			0	15	6	....		
„ 31..	0	10	11	....		„ 3..	....			10	11	1	....		
„ 31..	59	16	9	....		„ 3..	....			0	15	6	....		
„ 31..	0	11	3	....		„ 3..	....			1	12	0	....		
„ 31..	7	3	5	....									22	11	11
Sept. 1..	2	10	6	....		„ 2..	600	0	0	....			600	0	0
„ 1..	4	17	6	....											
„ 1..	0	15	2	....											
„ 3..	0	6	6	....											
„ 3..	0	9	2	....											
„ 3..	17	10	0	....											
„ 3..	0	18	0	....											
„ 3..	3	10	6	....											
„ 3..	5	13	8	....											
„ 3..	12	11	1	....											
„ 3..	4	18	7	....											
„ 3..	5	3	6	....											
„ 3..	0	12	9	....											
„ 3..	0	1	10	....											
„ 3..	2	14	9	....											
„ 3..	1	8	6	....											
„ 3..	27	12	8	....											
				255	10 5										
	To balance			....						By balance			331	5	8
			£	953	17 7							£	953	17	7

If the above Statement differs from your Books, we shall be glad if you will point out the difference at once.

Terms of Membership.

EXCERPT FROM SOCIETY'S RULES.

Admission of Members and Application for Shares.

The Society shall consist of such Co-operative Societies registered under the Industrial and Provident Societies Act, 1893, or any employé of this Society who is over twenty-one years of age, as have been admitted by the Committee, but no society trafficking in intoxicating liquors shall be eligible for membership in the Society, and each admission must be entered in the minute book of the Society. Every application for membership, except in the case of employés, must be sanctioned by a resolution of a general meeting of any society making such application, and the same must be made in the form given in Schedule A (see appendix at end of rules), said form to be duly attested by the signature of the president, secretary, and three of the members thereof, and stamped with such society's seal. Every society making application shall state the number of its members, and take up not less than one share for each member, and shall increase the number annually as its members increase, in accordance with its last return to the Registrar; but no member other than a society registered under the Industrial and Provident Societies Act, 1893, shall hold an interest in the funds exceeding £50. It shall be in the option of any society to apply for shares in excess of their individual membership at any time; such applications shall be signed by the president, secretary, and three members of committee, but the granting of such excess shares shall be at the discretion of the Committee of this Society.

Any employé applying for membership must apply for not less than five shares.

Capital: How Paid Up.

The capital of the Society shall be raised in shares of twenty shillings each, which shall be transferable only; every member, society, or employé, on admission, shall pay the sum of not less than one shilling on each share taken up, and the unpaid portion of the shares may be paid by dividends, or bonus, and interest; but any member may pay up shares in full or in part at any time.

APPLICATION FORM.

Whereas, by a resolution of the.....Co-operative Society Limited, passed at a general meeting held on the....day of....., it was resolved to take up.....shares (being one share of twenty shillings for each member), said shares being transferable, in the **Scottish Co-operative Wholesale Society Limited**, *and to accept the same on the terms and conditions specified in the Rules. Executed under the seal of the society on the....day of..... Attested by*

.....)
..... *Three Members.*
.....)

BENEFITS DERIVED FROM MEMBERSHIP.

(*a*) The liability of the member is limited, each member being only responsible for the value of the shares held.

(*b*) Members receive double the rate of dividend on purchases paid to non-members.

(*c*) Share capital is paid 5 per cent per annum.

(*d*) Members have a share in the management of the Wholesale in proportion to the amount of goods bought, as each society has one vote in right of membership, one for the first £1,000 worth of goods bought, and one other additional vote for every complete £2,000 of purchases thereafter.

These advantages, added to the special benefits secured by the leading position of the Wholesale, will, we trust, induce societies as yet non-members to carefully reconsider the question, and take the necessary steps to secure to their members the full benefits of co-operative distribution.

CORRESPONDENCE.

All letters must be addressed to the Society, and not to individuals. Addressed envelopes are supplied at cost price. Separate slips ought to be used for the different departments—the Accountant's, Grocery and Provision, Drapery, Boot and Shoe, Furniture. The slips can all be enclosed in the one envelope. Attention to this simple rule will greatly facilitate the despatch of goods and ensure promptitude in answering inquiries; it will also aid in the classification of the letters for reference in any case of irregularity or dispute.

Cash Remittance.

Cheques must be made payable to the Society. If remitted through the UNION BANK OF SCOTLAND LIMITED, the usual commission charged will be saved.

LIST OF BRANCHES

OF THE

UNION BANK OF SCOTLAND LIMITED.

HEAD OFFICES:—GLASGOW, INGRAM STREET; EDINBURGH, GEORGE STREET.
LONDON OFFICE:—62, CORNHILL, E.C.

Branches:

Aberdeen.
Aberdeen, George Street.
" Holburn.
" West End.
Aberfeldy.
Aberlour, Strathspey.
Alloa.
Alva.
Ardrishaig.
Ardrossan.
Auchterarder.
Auchtermuchty.
Ayr.
Ballater.
Banchory.
Banff.
Barrhead.
Barrhill.
Bathgate.
Beith.
Blair-Athole (sub to Pitlochrie).
Blairgowrie.
Bo'ness.
Braemar.
Brechin.
Bridge of Allan.
Buckie, Banffshire.
Campbeltown.
Castle-Douglas.
Clydebank.
Coatbridge.
Coupar-Angus.
Crieff.
Cullen.
Dalbeattie.
Dalry, Galloway.
Darvel (sub to Galston).
Doune.
Dumbarton.
Dumfries.
Dunblane.
Dundee.
Dunkeld.
Dunning.
Dunoon.
Edinburgh, Forrest Road.
" Golden Acre.
" Haymarket.
" Hunter Square.
" Lothian Road.
" Morningside.
Edinburgh, Murrayfield.
" Newington.
" Norton Park.
" S. Morningside (sub to Morningside).
Edzell.
Elgin.
Ellon.
Errol.
Fochabers.
Forfar.
Fraserburgh.
Galston.
Gatehouse.
Girvan.
Glasgow, Anderston.
" Bridgeton Cross.
" Charing Cross.
" Cowcaddens.
" Eglinton Street.
" Hillhead.
" Hope Street.
" Kinning Park.
" Maryhill.
" St. Vincent Street.
" Shawlands.
" Springburn.
" Tradeston.
" Trongate.
" Union Street.
Gourock.
Govan.
Greenock.
Hamilton.
Helensburgh.
Huntly.
Inveraray.
Inverness.
Inverurie.
Irvine.
Johnstone.
Keith.
Killin.
Kilmarnock.
Kincardine.
Kirkcaldy.
Kirkwall.
Kirriemuir.
Ladybank.
Largs.
Larkhall.
Leith.
Lerwick.
Leslie.
Lochgelly, Fifeshire.
Lochgilphead.
Macduff.
Maybole.
Mearns (open on Tuesdays and Fridays—sub to Barrhead).
Millport.
Moffat.
Moniaive.
New Aberdour (open on Mondays and Fridays — sub to Rosehearty).
New Pitsligo.
Paisley.
Paisley, Wellmeadow.
Partick.
Perth.
Peterhead.
Pitlochrie.
Port-Glasgow.
Portsoy.
Renfrew.
Rosehearty.
St. Margaret's Hope, Orkney.
Scalloway, Shetland (open on Tuesdays and Fridays—sub to Lerwick).
Shettleston.
Stewarton.
Stirling.
Stonehouse (open on Mondays, Wednesdays, and Fridays—sub to Larkhall).
Strachur, Lochfyne (open on Thursdays-sub to Inveraray).
Stranraer.
Strathaven.
Stromness.
Tarbert, Lochfyne.
Tarland.
Thornhill.
Tillicoultry.
Tollcross.
Troon.
Turriff.
Wick.

STATEMENT SHOWING THE PROGRESS OF THE SOCIETY

DATE, WITH COMPARISONS OF

	Year or Quarter ending	Number of Shares Subscribed. Societies.	Number of Shares Subscribed. Employés.	Capital: Includes Share, Loan Reserve, and Insurance Funds.	Net Sales.
				£	£
1st Quarter.....	Dec. 7, 1868	..	..	1,795	9,697
1st Year—52 weeks	Dec. 5, 1869	..	..	5,174	81,049
2nd „ 50 „	Nov. 19, 1870	..	..	12,542	105,294
3rd „ 52 „	„ 18, 1871	..	..	18,009	162,658
4th „ „ „	„ 16, 1872	18,708	..	30,931	262,530
5th „ „ „	„ 15, 1873	21,271	..	50,433	384,489
6th „ „ „	„ 14, 1874	24,654	..	48,981	409,947
7th „ „ „	„ 13, 1875	27,112	..	56,750	430,169
8th „ 51 „	„ 4, 1876	29,008	..	67,218	457,529
9th „ 52 „	„ 3, 1877	31,945	..	72,568	589,221
10th „ „ „	„ 2, 1878	34,830	..	83,173	600,590
11th „ „ „	„ 2, 1879	36,008	..	98,076	630,097
12th „ „ „	Oct. 30, 1880	41,584	..	110,179	845,221
13th „ „ „	Nov. 5, 1881	49,073	..	135,713	986,646
14th „ „ „	„ 4, 1882	53,684	..	169,428	1,100,588
15th „ „ „	„ 3, 1883	59,529	..	195,396	1,253,154
16th „ „ „	„ 1, 1884	65,331	..	244,186	1,300,331
17th „ „ „	Oct. 31, 1885	70,066	..	288,945	1,438,220
18th „ 60 „	Dec. 25, 1886	79,874	..	333,658	1,857,152
19th „ 53 „	„ 31, 1887	87,220	..	367,309	1,810,015
20th „ 52 „	„ 29, 1888	96,521	..	409,668	1,963,853
21st „ „ „	„ 28, 1889	107,004	..	480,622	2,273,782
22nd „ „ „	„ 27, 1890	117,664	..	575,322	2,475,601
23rd „ „ „	„ 26, 1891	131,086	..	671,108	2,828,036
24th „ 53 „	„ 31, 1892	139,022	..	778,494	3,104,768
25th „ 52 „	„ 30, 1893	149,164	2,726	869,756	3,135,562
26th „ „ „	„ 29, 1894	159,820	2,629	940,835	3,056,582
27th „ „ „	„ 28, 1895	171,985	3,099	1,134,269	3,449,461
28th „ „ „	„ 26, 1896	189,763	3,194	1,237,317	3,822,580
29th „ „ „	„ 25, 1897	211,859	4,308	1,286,624	4,405,854
30th „ 53 „	„ 31, 1898	223,669	5,054	1,333,078	4,692,330
122–23rd Quarters....	July 1, 1899	228,456	5,154	1,422,452	2,400,834

FROM ITS COMMENCEMENT IN SEPTEMBER, 1868, TILL

SALES AND OTHER INFORMATION.

Gross Total.	Increase on Corresponding Quarter of previous Year.	Rate per cent Increase.	Expenses.	Rate per £ on Sales.	
£ ..	£ ..	..	£ 153	3·8	1st Quarter.
90,791	..	..	1,035	3·0	1st Year—52 weeks.
196,041	24,155	29·7	1,549	3·5	2nd „ 50 „
358,699	57,408	54·5	2,180	3·2	3rd „ 52 „
621,230	99,872	61·4	3,469	3·1	4th „ „ „
1,005,719	121,958	46·4	5,055	3·1	5th „ „ „
1,415,667	25,458	6·6	6,696	3·9	6th „ „ „
1,845,836	20,222	4·9	7,137	3·9	7th „ „ „
2,303,365	27,359	6·3	7,540	3·9	8th „ 51 „
2,892,586	131,692	28·7	8,648	3·5	9th „ 52 „
3,493,177	11,369	1·9	10,095	4·0	10th „ „ „
4,123,275	29,507	4·9	11,117	4·2	11th „ „ „
4,968,496	215,124	34·1	13,020	3·7	12th „ „ „
5,955,143	141,424	16·7	15,757	3·8	13th „ „ „
7,055,732	113,942	11·5	19,686	4·2	14th „ „ „
8,308,886	152,565	13·8	22,120	4·2	15th „ „ „
9,609,218	47,177	3·7	24,307	4·5	16th „ „ „
11,047,438	137,888	10·6	27,314	4·5	17th „ „ „
12,904,590	418,931	29·1	36,942	4·7	18th „ 60 „
14,714,606	153,965	9·2	35,800	4·7	19th „ 53 „
16,678,460	178,897	10·0	39,411	4·8	20th „ 52 „
18,952,242	309,928	15·7	44,311	4·6	21st „ „ „
21,427,843	201,819	8·8	49,641	4·8	22nd „ „ „
24,255,880	352,435	14·2	58,140	4·8	23rd „ „ „
27,360,648	276,731	9·7	64,905	5·0	24th „ 53 „
30,496,211	30,793	1·0	72,255	5·5	25th „ 52 „
33,552,794	*78,979	*2·5	75,816	5·9	26th „ „ „
37,002,255	392,878	12·8	79,008	5·4	27th „ „ „
40,824,836	373,119	10·8	84,044	5·2	28th „ „ „
45,230,690	583,273	15·2	96,782	5·2	29th „ „ „
49,923,021	286,476	6·5	111,537	5·7	30th „ 53 „
52,323,855	116,758	5·1	56,426	5·7	122–23rd Quarters.

*Decrease.

STATEMENT SHOWING THE PROGRESS OF THE SOCIETY

DATE, WITH COMPARISONS OF SALES,

	Year or Quarter ending	Net Profit.	Total Net Profit.	Average Dividend.
		£	£	d.
1st Quarter.....	December 7, 1868..	48	..	..
1st Year—52 weeks..	December 5, 1869..	1,303	1,352	$3\frac{1}{4}$
2nd „ 50 „ ..	November 19, 1870..	2,418	3,770	$4\frac{3}{4}$
3rd „ 52 „ ..	„ 18, 1871..	4,131	7,902	$5\frac{1}{4}$
4th „ „ „ ..	„ 16, 1872..	5,435	13,337	$4\frac{3}{4}$
5th „ „ „ ..	„ 15, 1873..	7,445	20,783	$4\frac{3}{4}$
6th „ „ „ ..	„ 14, 1874..	7,553	28,336	$4\frac{1}{4}$
7th „ „ „ ..	„ 13, 1875..	8,232	36,569	4
8th „ 51 „ ..	„ 4, 1876..	8,836	45,405	4
9th „ 52 „ ..	„ 3, 1877..	10,925	56,330	4
10th „ „ „ ..	„ 2, 1878..	11,968	68,298	4
11th „ „ „ ..	„ 2, 1879..	14,988	83,287	$4\frac{3}{4}$
12th „ „ „ ..	October 30, 1880..	21,685	104,973	$6\frac{3}{4}$
13th „ 53 „ ..	November 5, 1881..	23,981	128,954	6
14th „ 52 „ ..	„ 4, 1882..	23,219	152,174	$5\frac{1}{2}$
15th „ „ „ ..	„ 3, 1883..	28,365	180,540	$5\frac{3}{4}$
16th „ „ „ ..	„ 1, 1884..	29,434	209,974	$5\frac{1}{2}$
17th „ „ „ ..	October 31, 1885..	39,641	249,616	$6\frac{3}{4}$
18th „ 60 „ ..	December 25, 1886..	50,398	300,014	$6\frac{1}{2}$
19th „ 53 „ ..	„ 31, 1887..	47,278	347,293	$6\frac{3}{4}$
20th „ 52 „ ..	„ 29, 1888..	53,538	400,832	$6\frac{1}{4}$
21st „ „ „ ..	„ 28, 1889..	61,756	462,588	$6\frac{1}{2}$
22nd „ „ „ ..	„ 27, 1890..	76,545	539,134	7
23rd „ „ „ ..	„ 26, 1891..	89,090	628,225	$6\frac{3}{4}$
24th „ 53 „ ..	„ 23, 1892..	96,027	724,252	$6\frac{3}{4}$
25th „ 52 „ ..	„ 30, 1893..	89,116	813,368	$6\frac{1}{4}$
26th „ „ „ ..	„ 29, 1894..	88,452	901,820	6
27th „ „ „ ..	„ 28, 1895..	132,374	1,034,195	7
28th „ „ „ ..	„ 26, 1896..	174,982	1,209,177	$7\frac{3}{4}$
29th „ „ „ ..	„ 25, 1897..	156,341	1,365,518	8
30th „ 53 „ ..	„ 31, 1898..	165,580	1,531,099	7
122–23rd Quarters.....	July 1, 1899..	101,581	1,632,681	8

FROM ITS COMMENCEMENT IN SEPTEMBER, 1868, TILL

AND OTHER INFORMATION—*continued.*

Reserve and Insurance Funds.			Depreciations Allowed on Buildings and Fixtures.		
Added.	Withdrawn.	Total Amount.	Amount.	Total Amount.	
£	£	£	£	£	
48	..	..	9	..	1st Quarter.
63	..	112	129	138	1st Year—52 weeks.
324	..	436	111	250	2nd „ 50 „
578	..	1,014	205	455	3rd „ 52 „
471	..	1,485	346	801	4th „ „ „
355	141	1,700	657	1,439	5th „ „ „
1,049	104	2,644	784	2,243	6th „ „ „
338	580	2,402	321	2,565	7th „ „ „
791	672	2,522	452	3,017	8th „ 51 „
918	343	3,097	485	3,503	9th „ 52 „
721	269	3,549	1,155	4,659	10th „ „ „
2,215	160	5,606	1,336	5,995	11th „ „ „
3,134	336	8,404	1,086	7,082	12th „ „ „
3,086	2,694	8,796	1,653	8,735	13th „ 53 „
3,824	334	12,286	1,688	10,424	14th „ 52 „
3,801	1,530	14,557	2,420	12,844	15th „ „ „
4,438	1,525	17,471	2,039	14,884	16th „ „ „
4,393	610	21,254	3,475	18,359	17th „ „ „
5,628	1,315	25,566	2,980	21,340	18th „ 60 „
8,474	1,389	32,651	3,019	24,360	19th „ 53 „
7,615	3,392	36,874	8,170	32,530	20th „ 52 „
10,244	2,941	44,177	6,284	38,815	21st „ „ „
10,636	1,931	52,882	6,843	45,659	22nd „ „ „
12,326	3,362	61,846	11,433	57,092	23rd „ „ „
17,353	5,052	74,147	10,219	67,311	24th „ 53 „
15,205	4,004	85,348	14,201	81,512	25th „ 52 „
14,839	34,460	65,728	48,404	129,917	26th „ „ „
16,685	3,782	78,931	35,871	165,788	27th „ „ „
29,712	4,878	103,765	41,454	207,243	28th „ „ „
23,183	3,381	123,567	33,869	241,112	29th „ „ „
29,473	5,933	147,107	52,997	294,109	30th „ 53 „
13,948	1,827	159,227	31,014	325,123	122–123rd Quarters.

GROCERY DEPARTMENT, GLASGOW.

Yearly Statement. Sales, Expenses, and Net Profit.

	Net Sales.				Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.
	Drapery and Boots.	Dundee.	Kilmarnock.	Grocery, Glasgow.	Total.				
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	d.	£ s. d.	d.	£
Quarter ending Dec. 7, 1868..	....	....	....	9,697 7 1	9,697 7 1	153 5 4	3·8	48 12 10	1·2	4,648
52 weeks „ „ 5, 1869..	....	....	....	81,094 2 6	81,094 2 6	1,035 12 8	3·0	1,303 15 0	3·8	5,478
50 „ „ Nov. 9, 1870..	....	....	....	105,249 12 4	105,249 12 4	1,549 17 2	3·5	2,418 9 2	5·6	9,060
52 „ „ „ 18, 1871..	....	....	....	162,658 7 7	162,658 7 7	2,180 18 3	3·2	4,131 8 6	6·0	14,000
52 „ „ „ 16, 1872..	....	....	....	262,530 19 10	262,530 19 10	3,469 18 4	3·1	5,435 3 9	4·9	21,050
52 „ „ „ 15, 1873..	....	....	....	384,489 4 0	384,489 4 0	5,055 15 7	3·1	7,445 19 1	4·5	24,510
52 „ „ „ 14, 1874..	....	....	....	409,947 7 9	409,947 7 9	6,696 14 2	3·9	7,553 5 2	4·4	24,700
52 „ „ „ 13, 1875..	....	....	....	430,169 7 11	430,169 7 11	7,137 15 5	3·9	8,232 11 6	4·5	29,400
51 „ „ „ 4, 1876..	42,952 0 10	....	....	414,576 19 6	457,529 0 4	7,540 2 8	3·9	8,836 2 3	4·6	39,550
52 „ „ „ 3, 1877..	50,654 14 2	....	....	507,582 14 4	558,237 8 6	8,196 19 7	3·5	10,443 15 6	4·4	39,510
52 „ „ „ 2, 1878..	56,480 17 7	....	....	467,342 1 0	523,822 18 7	8,976 5 4	4·1	10,289 0 10	4·7	40,130
52 „ „ „ 2, 1879..	60,046 3 9	....	....	481,949 12 2	541,995 15 11	9,832 8 6	4·3	12,625 11 3	5·5	50,400
52 „ „ Oct. 30, 1880..	83,856 9 10	....	....	615,601 5 5	699,457 15 3	10,880 2 11	3·7	17,908 0 6	6·0	43,190
53 „ „ Nov. 5, 1881..	102,157 0 11	11,121 15 7	....	679,534 6 4	792,813 2 10	12,930 11 8	3·9	18,439 1 3	5·5	63,380
6 months „ May 6, 1882..	53,190 8 0	10,385 14 5	12,982 1 4	336,413 13 0	412,971 16 9	8,080 8 7	4·4	8,270 16 9	4·8	61,920
6 „ „ Nov. 4, 1882..	....	....	....	383,884 1 3	383,884 1 3	5,299 13 4	3·3	7,589 19 0	4·7	34,620
52 weeks „ „ 3, 1883..	....	....	....	776,681 1 5	776,681 1 5	10,940 9 4	3·3	15,350 8 9	4·7	38,374
52 „ „ „ 1, 1884..	....	....	....	759,443 11 7	759,443 11 7	11,152 5 4	3·5	14,281 1 1	4·5	30,081
52 „ „ Oct. 31, 1885..	....	....	....	761,889 7 11	761,889 7 11	11,881 1 0	3·7	16,187 18 9	5·0	28,130
60 „ „ Dec. 25, 1886..	....	....	....	936,030 19 0	936,030 19 0	14,481 16 4	3·7	19,073 6 9	4·9	37,450
53 „ „ „ 31, 1887..	....	....	....	895,560 6 4	895,560 6 4	13,163 8 7	3·5	20,351 5 3	5·4	56,095
52 „ „ „ 29, 1888..	....	....	....	972,790 2 2	972,790 2 2	14,435 1 0	3·5	23,399 9 11	5·7	44,610
52 „ „ „ 28, 1889..	....	....	....	1,148,832 5 5	1,148,832 5 5	16,190 9 8	3·4	27,930 15 8	5·8	56,000
52 „ „ „ 27, 1890..	....	....	....	1,223,450 16 3	1,223,450 16 3	17,406 17 10	3·4	30,380 13 7	5·9	63,000
52 „ „ „ 26, 1891..	....	....	....	1,419,722 0 0	1,419,722 0 0	20,141 6 3	3·4	34,714 5 7	5·8	87,400
53 „ „ „ 31, 1892..	....	....	....	1,559,700 3 6	1,559,700 3 6	22,698 10 2	3·5	35,225 3 0	5·4	86,860
52 „ „ „ 30, 1893..	....	....	....	1,574,712 13 5	1,574,712 13 5	25,180 11 4	3·8	36,446 12 8	5·5	88,705
52 „ „ „ 29, 1894..	....	....	....	1,482,218 19 4	1,482,218 19 4	25,939 15 11	4·2	33,831 4 9	5·4	70,955
52 „ „ „ 28, 1895..	....	....	....	1,670,916 7 8	1,670,916 7 8	26,587 13 0	3·8	49,578 12 3	7·1	80,424
52 „ „ „ 26, 1896..	....	....	....	1,872,908 17 6	1,872,908 17 6	28,110 0 7	3·6	55,280 10 11	7·0	68,937
52 „ „ „ 25, 1897..	....	....	....	2,245,591 11 6	2,245,591 11 6	31,411 14 6	3·3	63,068 6 7	6·7	87,121
53 „ „ „ 31, 1898..	....	....	....	2,373,039 1 9	2,373,039 1 9	34,623 7 9	3·5	64,788 1 11	6·5	77,238
26 „ „ July 1, 1899..	....	....	....	1,188,280 11 8	1,188,280 11 8	16,794 19 11	3·4	38,595 15 0	7·8	77,495
Totals.....	449,337 15 1	21,507 10 0	12,982 1 4	28,594,449 18 5	29,078,277 4 10	440,155 18 0	3·6	709,405 4 9	5·8	....

GROCERY DEPARTMENT, LEITH.

Yearly Statement, showing Sales, Expenses, and Net Profit.

	Net Sales.	Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Amount of Stock.
	£ s. d.	£ s. d.	d.	£ s. d.	d.	£
Year ending November 3, 1877—52 weeks....	30,984 0 9	451 17 0	3·5	481 12 9	3·7	4,590
„ „ „ 2, 1878 „ „	76,767 11 1	1,119 10 4	3·5	1,679 0 11	5·2	3,000
„ „ „ 1, 1879 „ „	88,101 15 11	1,284 16 8	3·5	2,363 8 3	6·4	6,480
„ „ October 30, 1880 „ „	145,764 0 3	2,140 6 2	3·5	3,777 4 2	6·2	8,410
„ „ November 5, 1881—53 „	193,833 10 10	2,826 11 8	3·5	5,542 7 9	6·8	13,400
„ „ „ 4, 1882—52 „	205,728 16 3	2,927 11 2	3·4	4,895 11 9	5·7	14,890
„ „ „ 3, 1883 „ „	255,160 2 2	3,488 17 9	3·2	6,093 19 3	5·7	20,045
„ „ „ 1, 1884 „ „	281,509 2 4	3,992 8 2	3·4	6,935 10 4	5·9	16,250
„ „ October 31, 1885 „ „	363,664 7 11	5,031 1 8	3·3	10,572 0 8	6·9	29,750
„ „ December 25, 1886—60 „	496,240 13 8	7,160 19 5	3·4	12,452 11 4	6·0	24,000
„ „ „ 31, 1887—53 „	496,673 11 8	7,256 5 4	3·5	13,217 13 3	6·3	42,420
„ „ „ 29, 1888—52 „	536,600 10 6	7,971 7 4	3·5	14,112 13 9	6·3	31,080
„ „ „ 28, 1889 „ „	584,617 12 1	8,381 3 1	3·4	13,525 12 9	5·5	35,750
„ „ „ 27, 1890 „ „	602,908 9 5	8,371 5 10	3·3	15,031 4 6	5·9	34,600
„ „ „ 26, 1891 „ „	693,179 13 10	9,825 7 8	3·4	18,421 11 10	6·4	42,820
„ „ „ 31, 1892—53 „	737,663 6 4	10,317 18 1	3·3	17,767 8 10	5·7	41,050
„ „ „ 30, 1893—52 „	757,569 9 10	10,935 4 7	3·4	15,898 18 7	5·0	52,409
„ „ „ 29, 1894 „ „	706,466 3 9	10,718 5 3	3·6	16,488 12 2	5·6	33,464
„ „ „ 28, 1895 „ „	751,550 19 7	10,531 15 8	3·3	22,885 11 2	7·3	31,647
„ „ „ 26, 1896 „ „	805,758 8 11	11,144 9 7	3·3	22,569 12 8	6·7	26,530
„ „ „ 25, 1897—52 „	901,669 12 2	11,901 14 3	3·1	24,798 5 5	6·6	34,204
„ „ „ 31, 1898—53 „	951,295 10 1	12,664 17 1	3·2	28,102 15 0	7·0	24,775
Half Year ending July 1, 1899—26 „	452,912 14 7	6,121 15 9	3·2	14,336 15 11	7·6	21,125
Totals	11,116,620 3 11	156,565 9 6	3·3	291,950 3 0	6·3	

Quarterly Statement, Grocery Department, Kilmarnock.—From Date of keeping a Separate Account.

Quarter ending	Net Sales.	Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.
	£ s. d.	£ s. d.	d.	£ s. d.	d.	£
August 5, 1882	6,594 0 5	190 15 1	7·0	163 7 8	6·0	535
November 4, 1882	8,849 10 3	221 7 8	6·0	137 9 1	3·7	1,550
February 3, 1883	9,894 13 1	245 18 11	5·9	362 11 7	8·7	2,320
May 5, 1883	10,192 13 4	236 7 10	5·5	472 3 0	11·1	2,120
August 4, 1883	7,979 7 10	245 14 8	7·3	238 4 11	7·1	720
November 3, 1883	11,625 19 8	225 0 1	4·6	176 13 6	3·6	1,663
February 2, 1884	8,446 16 2	217 1 5	6·1	123 10 4	3·5	2,898
May 3, 1884	9,492 2 9	197 12 5	4·9	162 2 9	4·0	1,781
August 2, 1884	9,145 12 11	208 15 8	5·4	114 15 5	3·0	963
November 1, 1884	12,989 5 11	198 7 11	3·7	235 6 3	4·2	2,812
January 31, 1885	10,094 9 8	204 18 3	4·8	69 14 9	1·6	2,521
May 2, 1885	8,874 3 9	159 14 3	4·3	258 5 9	6·9	1,750
August 1, 1885	8,644 2 7	192 11 6	5·3	102 4 1	2·8	1,132
October 31, 1885	14,012 17 7	208 14 3	3·5	534 12 2	9·1	2,300
January 30, 1886	9,461 10 4	204 13 0	5·2	295 13 5	7·5	2,010
May 1, 1886	9,439 14 11	177 13 5	4·5	289 7 4	7·3	1,600
July 31, 1886	9,434 7 4	193 15 8	4·9	264 10 0	6·7	760
*December 25, 1886	23,129 5 10	309 3 2	3·2	908 16 9	9·4	2,070
March 26, 1887	11,129 13 7	170 3 9	3·6	364 3 8	7·8	2,615
June 25, 1887	9,928 13 5	189 4 9	4·5	255 7 8	6·1	1,525
September 24, 1887	15,469 2 4	221 10 8	3·4	895 18 3	13·6	1,070
†December 31, 1887	16,152 2 11	245 9 8	4·2	758 15 6	11·2	2,585
March 31, 1888	11,715 9 7	179 9 8	4·0	328 8 3	6·7	2,850
June 30, 1888	13,539 14 3	202 10 10	3·6	379 15 5	6·7	2,410
September 29, 1888	13,946 14 7	218 14 2	3·8	23 10 11	0·4	2,329
December 29, 1888	15,162 13 11	229 9 1	3·6	324 10 8	5·1	3,200
March 30, 1889	10,597 0 5	178 4 0	4·0	178 19 2	4·0	2,080
June 29, 1889	11,538 7 6	216 13 3	4·5	102 6 9	2·1	2,600
September 28, 1889	14,378 11 7	224 18 1	3·7	406 12 5	6·8	1,420

* Twenty-one weeks. † Fourteen weeks.

December 28, 1889	17,926 18 8	233 2 5	3·1	623 11 11	8·3	2,910
March 29, 1890	12,361 8 6	194 12 5	3·7	560 3 8	10·8	2,040
June 28, 1890	13,618 4 4	275 0 3	4·8	563 8 7	9·9	1,050
September 27, 1890	14,223 6 2	199 8 3	3·3	550 8 9	9·2	190
December 27, 1890	16,807 11 3	246 2 10	3·5	972 15 1	13·8	2,400
March 28, 1891	14,162 9 0	222 13 6	3·7	685 3 1	11·6	1,480
June 27, 1891	14,804 7 6	274 11 7	4·4	609 2 3	9·8	2,000
September 26, 1891	16,299 14 11	264 15 11	3·8	620 3 7	9·1	1,170
December 26, 1891	22,168 2 4	327 1 2	3·5	875 2 0	9·5	2,225
March 26, 1892	16,745 1 7	276 11 9	3·9	1,070 6 5	15·3	2,400
June 25, 1892	15,327 12 8	315 14 3	4·9	786 7 3	12·3	2,440
†September 24, 1892	17,342 12 1	335 16 11	4·6	358 10 10	4·9	2,070
December 31, 1892	23,251 16 11	374 11 5	3·8	897 7 7	9·2	2,000
April 1, 1893	17,353 1 8	305 15 3	4·2	658 4 6	9·1	2,070
July 1, 1893	15,298 10 11	339 9 7	5·3	298 14 7	4·6	1,985
September 30, 1893	17,856 2 9	371 12 1	4·9	438 0 5	5·8	1,840
December 30, 1893	20,351 19 6	411 12 1	4·8	782 16 4	9·2	1,850
March 31, 1894	18,471 14 6	394 9 5	5·1	534 4 2	6·9	2,570
June 30, 1894	17,108 10 6	400 14 8	5·6	623 10 7	8·7	1,890
September 29, 1894	17,723 14 11	407 3 10	5·5	‡337 17 2	4·5	1,540
December 29, 1894	21,701 16 6	437 16 7	4·8	1,273 17 4	14·0	2,370
March 30, 1895	20,133 13 0	419 6 3	5·0	889 13 2	10·6	2,945
June 29, 1895	17,831 14 10	418 13 7	5·6	405 4 8	5·4	2,515
September 28, 1895	19,055 18 0	449 8 11	5·6	440 19 4	5·5	1,210
December 28, 1895	22,051 6 7	432 6 2	4·7	1,053 0 4	11·4	2,030
March 28, 1896	18,192 2 1	433 19 2	5·6	817 0 0	10·7	1,912
June 27, 1896	17,443 19 2	434 15 8	6·0	517 17 9	7·1	1,221
*December 26, 1896	44,588 13 2	942 14 6	5·1	1,795 15 0	9·6	2,836
*June 26, 1897	45,321 18 4	949 4 8	5·0	1,598 9 0	8·5	2,007
*December 25, 1897	53,689 18 4	1,132 16 3	5·0	1,734 9 6	7·7	3,049
*June 25, 1898	47,071 13 5	1,042 18 7	5·3	1,079 2 6	5·5	1,993
§*December 31, 1898	50,837 9 1	1,110 8 3	5·2	1,703 10 10	8·0	2,636
*July 1, 1899	50,304 6 3	1,033 10 3	4·9	2,018 16 1	9·6	1,882
Totals	1,099,286 7 10	21,523 11 6	4·7	36,415 17 4	7·9	....

* Half Year. † Fourteen weeks. ‡ Loss. § Twenty-seven weeks.

QUARTERLY STATEMENT, GROCERY DEPARTMENT, DUNDEE.—From Date of keeping a Separate Account.

Quarter ending	Net Sales.	Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Net Loss.	Rate per £ of Sales.	Stocks.
	£ s. d.	£ s. d.	d.	£ s. d.	d.	£ s. d.	d.	£
August 5, 1882..	6,328 4 0	237 2 11	8·8	....	..	126 19 9	4·8	1,204
November 4, 1882..	7,180 12 3	207 17 9	7·0	....	..	98 12 7	3·3	1,475
February 3, 1883..	8,513 10 1	217 6 4	6·1	67 12 4	1·8	....	..	1,040
May 5, 1883..	8,583 16 3	226 13 4	6·3	96 1 7	2·7	....	..	1,080
August 4, 1883..	9,050 6 4	245 1 3	6·5	5 15 3	0·1	....	..	1,923
November 3, 1883..	8,533 5 8	218 11 2	6·1	71 2 5	2·0	....	..	2,455
February 2, 1884..	9,278 1 10	235 12 9	6·1	88 14 11	2·2	....	..	2,250
May 3, 1884..	10,943 14 6	252 16 9	5·6	181 7 10	4·0	....	..	1,975
August 2, 1884..	12,648 2 11	262 11 10	5·0	260 9 7	4·9	....	..	2,950
November 1, 1884..	13,776 3 6	275 12 6	4·8	73 16 8	1·3	....	..	2,690
January 31, 1885..	12,080 7 2	291 8 8	5·8	111 1 3	2·2	....	..	1,080
May 2, 1885..	13,424 7 0	242 12 6	4·3	189 3 2	3·4	....	..	1,950
August 1, 1885..	14,930 3 3	251 12 1	4·0	359 16 4	5·8	....	..	2,940
October 31, 1885..	15,685 3 4	271 7 11	4·2	348 15 2	5·3	....	..	2,890
January 30, 1886..	12,248 16 9	248 12 8	4·8	238 13 5	4·6	....	..	1,300
May 1, 1886..	13,616 12 9	283 8 7	5·0	86 11 2	1·5	....	..	2,670
July 31, 1886..	14,912 1 10	265 7 11	4·2	205 17 7	3·3	....	..	3,250
*December 25, 1886..	22,975 17 8	397 17 9	4·1	348 8 3	3·7	....	..	2,600
March 26, 1887..	13,916 4 6	244 6 5	4·2	163 5 0	2·8	....	..	1,885
June 25, 1887..	13,810 2 11	241 9 2	4·2	210 10 3	3·6	....	..	3,050
September 24, 1887..	15,064 15 6	265 8 7	4·2	212 6 11	3·4	....	..	3,020
†December 31, 1887..	16,231 4 0	281 14 4	4·2	279 17 11	4·2	....	..	3,210
March 31, 1888..	12,205 12 7	246 11 4	4·8	286 9 8	5·6	....	..	2,770
June 30, 1888..	14,865 19 7	262 6 11	4·2	154 19 5	2·5	....	..	3,740
September 29, 1888..	14,857 13 3	281 9 7	4·5	253 8 2	4·1	....	..	5,370
December 29, 1888..	15,323 1 0	284 8 1	4·4	321 3 11	5·0	....	..	2,710
March 30, 1889..	16,415 11 3	256 13 3	3·7	245 2 6	3·5	....	..	3,230
June 29, 1889..	20,090 11 2	286 1 0	3·4	618 7 4	7·3	....	..	5,940
September 28, 1889..	19,022 12 6	295 18 4	3·7	60 4 11	0·7	....	..	4,590

* Twenty-one weeks. † Fourteen weeks.

December 28, 1889..	17,987	11	8	284	1	6	3·7	206	9	7	2·7	....	..	4,150
March 29, 1890..	15,713	6	7	274	19	11	4·2	244	7	7	3·7	....	..	3,420
June 28, 1890..	16,324	16	0	288	16	9	4·2	244	8	2	3·6	....	..	3,590
September 27, 1890..	18,593	3	6	321	13	11	4·1	290	8	8	3·7	....	..	5,390
December 27, 1890..	16,411	8	5	303	8	0	4·4	364	2	5	5·3	....	..	4,070
March 28, 1891..	19,284	18	2	322	10	5	4·0	282	12	10	3·5	....	..	4,070
June 27, 1891..	19,673	16	4	313	17	9	3·8	309	10	10	3·7	....	..	5,200
September 26, 1891..	21,683	3	1	310	16	4	3·4	458	0	11	5·0	....	..	4,360
December 26, 1891..	19,207	14	2	296	1	6	3·7	338	8	8	4·2	....	..	3,550
March 26, 1892..	21,503	7	8	290	18	2	3·2	390	5	0	4·3	....	..	3,500
June 25, 1892..	22,609	4	1	314	3	2	3·3	251	1	8	2·6	....	..	4,660
September 24, 1892..	24,100	0	1	354	16	8	3·5	464	9	11	4·7	....	..	7,940
†December 31, 1892..	23,459	3	2	314	3	2	3·2	553	0	11	5·8	....	..	3,990
April 1, 1893..	21,282	4	1	299	13	0	3·3	453	10	4	5·1	....	..	2,970
July 1, 1893..	24,031	11	5	313	9	1	3·1	606	6	8	6·0	....	..	5,280
September 30, 1893..	23,872	2	1	310	0	1	3·1	511	9	8	5·1	....	..	3,730
December 30, 1893..	23,682	9	9	317	2	7	3·2	658	12	7	6·9	....	..	2,900
March 31, 1894..	21,590	11	5	305	17	0	3·4	593	13	6	6·6	....	..	2,704
June 30, 1894..	23,132	16	7	308	3	0	3·2	629	8	7	6·5	....	..	4,377
September 29, 1894..	24,272	16	2	333	9	7	3·2	599	1	7	5·9	....	..	3,380
December 29, 1894..	20,739	17	2	306	0	9	3·5	547	8	3	6·3	....	..	2,214
March 30, 1895..	21,641	16	11	288	17	1	3·2	483	1	9	5·3	....	..	1,670
June 29, 1895..	24,223	17	1	319	7	5	3·1	614	15	4	6·0	....	..	2,812
September 28, 1895..	25,330	0	9	316	4	10	2·9	639	7	8	6·0	....	..	2,505
December 28, 1895..	25,149	4	6	303	14	10	2·9	553	2	5	5·3	....	..	2,260
March 28, 1896..	26,174	2	4	325	12	6	3·0	656	16	4	6·0	....	..	2,450
June 27, 1896..	26,815	8	0	327	0	6	3·0	675	18	1	6·0	....	..	2,743
‡December 26, 1896..	56,486	2	2	645	14	3	2·7	1,728	5	3	7·3	....	..	2,087
‡June 26, 1897..	53,429	3	2	668	5	6	3·0	1,354	17	7	6·1	....	..	2,580
‡December 25, 1897..	55,664	18	8	706	5	6	3·0	1,701	16	3	7·3	....	..	2,833
‡June 25, 1898..	53,012	11	5	669	5	0	3·0	1,580	19	2	7·1	....	..	3,030
§December 31, 1898..	57,436	10	3	672	8	8	2·8	1,784	5	2	7·4	....	..	2,106
‡July 1, 1899..	52,435	17	3	640	6	7	2·9	1,556	6	4	7·1	....	..	2,382
Totals..	1,303,495	9	5	19,945	6	8	3·6	27,865	12	7	..	225	12	4	..	..
								225	12	4	..					
								27,640	0	3	5·0					

† Fourteen weeks.
‡ Half year.
§ Twenty-seven weeks.

QUARTERLY STATEMENT, DRAPERY DEPARTMENT.—From Date of keeping a Separate Account.

Quarter ending	Net Sales. Boots.	Furniture.	Drapery.	Total.	Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£	£ s. d.	£	£
August 5, 1882 ..	8,351 15 0	2,693 6 11	21,144 6 11	32,189 8 10	1,123 9 9	8·4	1,171 8 2	8·7	28,560
Nov. 4, 1882 ..	9,267 11 10	2,057 1 11	25,587 12 9	36 912 6 6	1,356 1 2	8·8	1,308 6 6	8·7	34,030
Feb. 3, 1883 ..	7,520 4 4	2,280 17 3	22,301 14 3	32,102 15 10	1,409 11 3	10·5	967 14 0	7·2	33,260
May 5, 1883 ..	8,159 0 7	1,904 14 4	25,682 6 9	35,746 1 8	1,438 12 11	9·6	1,090 8 2	7·3	31,231
August 4, 1883 ..	9,368 12 4	3,045 1 9	23,937 10 11	36,351 5 0	1,447 8 1	9·5	1,284 12 4	8·5	31,253
Nov. 3, 1883 ..	9,658 4 3	2,518 11 10	30,562 12 8	42,739 8 9	1,534 9 3	8·6	1,807 4 8	10·1	32,281
Feb. 2, 1884 ..	8,944 16 1	2,994 17 9	26,445 3 8	38,384 17 6	1,588 18 8	9·9	1,605 11 5	10·0	33,192
May 3, 1884 ..	9,782 13 2	2,307 11 1	30,463 14 9	42,553 19 0	1,666 5 8	9·4	1,591 16 7	9·0	36,065
August 2, 1884 ..	10,981 0 10	4,595 4 10	28,337 2 6	43,913 8 2	1,731 9 9	9·4	1,717 4 10	9·3	35.784
Nov. 1, 1884 ..	10,884 13 3	2,887 1 9	34,034 16 0	47,806 11 0	1,827 15 5	9·1	1,899 14 5	9·5	39,661
Jan. 31, 1885 ..	....	....	30,267 3 3	30,267 3 3	1,290 0 9	10·2	1,319 11 1	10·1	31,084
May 2, 1885 ..	....	....	37,153 15 9	37,153 15 9	1,414 15 11	9·1	1,492 17 7	9·6	32,340
August 1, 1885 ..	....	....	33,578 12 7	33,578 12 7	1,438 19 0	10·2	1,211 0 11	8·7	31,020
Oct. 31, 1885 ..	....	....	39,994 14 4	39,994 14 4	1,547 6 10	9·2	1,847 0 5	11·0	35,990
Jan. 30, 1886 ..	....	....	33,029 17 3	33,029 17 3	1,554 9 2	11·2	1,216 7 10	9·0	33,150
May 1, 1886 ..	....	....	44,570 17 11	44,570 17 11	1,641 9 6	8·8	1,709 19 3	9·2	36,340
July 31, 1886 ..	....	....	42,129 5 5	42,129 5 5	1,705 8 3	9·7	1,801 11 5	10·3	40,100
*Dec. 25, 1886 ..	....	....	75,835 10 10	75,835 10 10	3,362 6 4	10·6	3,983 5 11	12·6	45,740
March 26, 1887 ..	....	....	40,647 13 5	40,647 13 5	2,028 12 8	11·9	1,248 2 8	7·3	47,670
June 25, 1887 ..	....	....	50,432 4 9	50,432 4 9	2,081 15 1	9·9	2,185 17 1	10·4	42,170
Sept. 24, 1887 ..	....	....	47,697 15 3	47,697 15 3	2,065 14 10	10·3	2,234 6 10	11·2	45,870
†Dec. 31, 1887 ..	....	....	55,420 13 10	55,420 13 10	2,294 1 9	10·0	2,487 10 2	10·7	41,400
March 31, 1888 ..	....	....	48,630 9 0	48,630 9 0	2,176 17 7	10·7	1,661 14 11	8·2	48,645
June 30, 1888 ..	....	....	56,216 13 4	56,216 13 4	2,257 18 4	9·6	2,175 16 9	9·2	43,240
Sept. 29, 1888 ..	....	....	57,138 9 11	57,138 9 11	2,324 4 0	9·7	2,186 15 11	9·2	50,050
Dec. 29, 1888 ..	....	....	56,928 16 6	56,928 16 6	2,486 11 6	10·4	2,057 16 3	8·6	47,990
March 30, 1889 ..	....	....	55,006 13 0	55,006 13 0	2,493 3 11	10·8	2,294 3 2	10·0	54,600

* Twenty-one weeks. † Fourteen weeks.

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QUARTERLY STATEMENT, BOOT AND SHOE DEPARTMENT.

From Date of keeping a Separate Account.

Quarter ending	Net Sales.	Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.
	£ s. d.	£ s. d.		£ s. d.		£
January 31, 1885	10,188 11 5	290 18 9	6·8	596 3 8	14·0	5,990
May 2, 1885	12,549 19 5	353 2 4	6·7	608 18 9	11·6	5,530
August 1, 1885	16,185 10 11	429 16 10	6·4	777 3 8	11·5	9,400
October 31, 1885	16,542 18 4	529 0 6	7·6	499 12 2	7·2	11,520
January 30, 1886	14,120 7 6	549 9 11	9·3	460 5 6	7·8	11,200
May 1, 1886	16,190 5 3	556 12 0	8·3	560 19 3	8·3	11,130
July 31, 1886	16,467 16 11	538 0 6	7·9	585 11 5	8·5	11,490
*December 25, 1886	28,856 18 8	980 7 10	8·2	942 0 7	7·8	15,500
March 25, 1887	14,242 19 10	602 18 11	10·1	256 19 6	4·3	14,150
June 25, 1887	18,416 14 3	602 10 3	7·8	616 6 6	8·0	13,185
September 24, 1887	17,259 16 10	598 15 6	8·2	310 11 7	4·3	14,730
†December 31, 1887	20,704 14 9	736 4 10	8·3	605 2 9	7·0	15,490
March 31, 1888	16,373 12 5	669 10 7	10·1	153 9 6	2·3	15,630
June 30, 1888	19,721 3 3	652 6 7	8·0	389 16 3	4·7	11,710
September 29, 1888	19,657 10 9	705 7 2	8·6	464 2 1	5·6	13,300
December 29, 1888	22,183 2 7	781 13 8	8·4	424 2 5	4·7	15,390
March 30, 1889	18,000 17 5	751 17 11	10·0	240 2 8	3·2	14,680
June 29, 1889	24,306 1 9	873 14 1	8·6	589 8 9	5·8	15,070
September 28, 1889	22,671 17 3	872 5 2	9·2	441 5 7	4·7	18,000
December 28, 1889	26,200 2 6	893 19 7	8·2	720 13 3	6·6	16,950
March 29, 1890	22,593 13 8	900 17 4	9·5	444 10 10	4·7	16,420
June 28, 1890	28,847 19 5	1,022 19 8	8·5	885 16 10	7·4	16,560
September 27, 1890	29,285 17 2	929 3 8	7·7	888 6 1	7·2	15,650
December 27, 1890	31,008 16 11	958 18 0	7·4	1,012 6 5	7·8	14,360
March 28, 1891	27,090 17 3	988 0 7	8·7	889 8 2	7·8	14,930

*Twenty-one weeks. †Fourteen weeks.

QUARTERLY STATEMENT, BOOT AND SHOE DEPARTMENT—*continued.*

Quarter ending	Net Sales.	Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.
	£ s. d.	£ s. d.		£ s. d.		£
June 27, 1891	34,702 19 11	1,040 19 8	7·2	1,292 6 11	8·9	17,050
September 26, 1891	33,273 16 8	1,019 3 9	7·3	1,238 11 2	8·9	14,800
December 26, 1891	37,424 1 0	1,097 15 8	7·0	1,515 18 10	9·7	17,470
March 26, 1892	29,028 13 5	1,088 15 7	9·0	1,009 4 2	8·3	17,630
June 25, 1892	39,526 1 10	1,230 1 10	7·4	1,645 17 8	9·9	16,760
September 24, 1892	35,601 10 8	1,200 1 5	8·1	1,208 12 7	8·1	16,650
†December 31, 1892	42,902 19 10	1,387 11 9	7·7	1,906 4 3	10·6	20,490
April 1, 1893	32,874 3 1	1,352 1 5	9·8	1,084 0 1	7·9	21,480
July 1, 1893	43,534 17 11	1,742 5 2	9·6	1,442 18 6	7·9	25,747
September 30, 1893	36,008 15 2	1,771 7 0	11·8	883 16 4	5·8	25,372
December 30, 1893	41,348 0 6	1,871 15 6	10·8	1,145 6 1	6·6	29,188
March 31, 1894	34,803 19 0	1,890 8 9	13·0	743 5 0	5·0	27,095
June 30, 1894	46,030 15 0	1,898 3 1	9·9	1,126 12 10	5·9	24,974
September 29, 1894	34,833 2 10	1,880 16 10	12·9	592 16 6	4·0	28,874
December 29, 1894	44,641 12 0	1,947 9 5	10·4	1,154 13 1	6·2	31,096
March 30, 1895	37,839 2 0	1,963 12 10	12·4	539 0 3	3·4	31,105
June 29, 1895	53,632 11 11	2,087 11 2	9·3	1,519 1 9	6·8	26,774
September 28, 1895	43,355 4 10	1,972 0 10	10·9	1,296 18 6	7·1	33,051
December 28, 1895	52,810 18 10	2,062 8 5	9·4	1,568 3 11	7·1	34,754
March 28, 1896	41,354 11 8	1,993 14 10	11·5	991 11 5	5·7	23,735
June 27, 1896	58,636 2 5	2,021 10 3	8·2	2,211 5 9	9·0	24,369
‡December 26, 1896	113,814 12 3	4,117 8 11	8·6	3,654 3 0	7·7	35,412
‡June 26, 1897	114,834 15 9	4,464 4 5	9·3	3,173 6 11	6·6	45,893
‡December 25, 1897	121,362 19 6	5,190 4 8	10·2	2,881 11 4	5·7	68,511
‡June 25, 1898	125,525 6 0	5,698 1 3	10·9	2,060 17 10	3·9	65,996
§December 31, 1898	137,088 19 6	5,875 5 0	10·3	1,472 3 10	2·6	58,041
‡July 1, 1899	155,856 15 2	5,803 11 5	9·0	4,386 16 10	6·7	50,344
Totals	2,132,315 15 1	83,437 3 0	9·4	58,108 9 6	6·5	....

†Fourteen weeks. ‡Half year. §Twenty-seven weeks.

QUARTERLY STATEMENT, FURNITURE AND FURNISHING DEPARTMENT.

From Date of keeping a Separate Account.

Quarter ending	Net Sales.	Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.
	£ s. d.	£ s. d.	d.	£ s. d.	d.	£
January 31, 1885	3,022 18 2	210 11 11	16·7	81 13 3	6·4	3,500
May 2, 1885	2,636 9 6	262 5 10	23·8	‡4 17 11	0·4	4,410
August 1, 1885	7,200 12 9	392 6 7	13·0	221 4 9	7·4	4,620
October 31, 1885	5,599 11 1	420 1 5	18·0	133 3 10	5·6	5,600
January 20, 1886	6,744 8 11	445 7 4	15·8	145 4 10	5·2	6,180
May 1, 1886	7,026 7 0	470 18 2	16·0	195 9 8	6·4	7,020
July 31, 1886	9,621 1 11	500 9 6	12·4	410 10 0	10·2	7,650
*December 25, 1886	13,157 12 1	914 4 7	16·6	292 9 7	5·4	7,400
March 25, 1887	7,315 11 8	577 14 1	18·9	160 16 8	5·2	8,750
June 25, 1887	11,033 17 4	590 17 11	12·8	641 14 4	13·9	9,290
September 24, 1887	8,567 19 0	618 12 4	17·3	323 12 11	9·0	9,570
†December 31, 1887	11,956 12 7	723 6 11	14·5	677 17 2	13·6	9,150
March 31, 1888	8,295 17 1	667 6 7	19·3	311 7 10	9·0	10,370
June 30, 1888	12,865 9 6	738 3 6	13·9	735 16 7	13·9	10,540
September 29, 1888	9,876 13 4	780 1 6	18·9	245 16 0	5·9	10,000
December 29, 1888	12,582 11 8	860 10 4	16·4	412 16 5	7·8	10,820
March 30, 1889	9,970 0 8	814 4 1	19·6	285 2 3	6·8	11,990
June 29, 1889	15,812 15 7	918 7 0	13·9	762 19 10	7·5	11,170
September 28, 1889	12,451 19 0	905 16 2	17·4	625 14 2	12·0	10,380
December 28, 1889	16,871 0 8	930 18 5	13·2	916 2 10	13·0	10,450
March 29, 1890	14,418 6 7	926 4 4	15·4	567 11 8	9·4	11,410
June 28, 1890	21,501 17 11	1,045 3 0	11·6	1,339 5 4	14·9	11,150
September 27, 1890	18,076 15 11	1,103 5 1	15·3	1,287 13 10	17·0	12,240
December 27, 1890	22,149 13 4	1,261 10 4	13·6	1,504 10 0	16·2	13,600
March 28, 1891	15,095 13 8	1,287 17 7	20·4	557 8 2	8·8	15,700

* Twenty-one weeks. † Fourteen weeks. ‡ Loss.

QUARTERLY STATEMENT, FURNITURE AND FURNISHING DEPARTMENT—*continued.*

Quarter ending	Net Sales.	Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.
	£ s. d.	£ s. d.	d.	£ s. d.	d.	£
June 27, 1891	25,335 18 11	1,412 1 8	13·3	1,323 6 11	12·5	16,350
September 26, 1891	19,759 6 0	1,384 18 2	16·8	1,138 9 3	13·8	16,520
December 26, 1891	24,953 4 7	1,471 7 10	14·1	1,026 0 6	9·9	16,400
March 26, 1892	18,157 8 11	1,492 1 11	19·7	410 18 11	5·4	18,330
June 25, 1892	27,834 1 5	1,578 10 5	13·6	1,368 12 10	11·8	16,600
September 24, 1892	20,853 9 11	1,527 8 3	17·2	1,096 18 3	12·6	16,700
†December 31, 1892	27,476 19 0	1,740 6 7	15·2	1,298 19 10	11·3	16,330
April 1, 1893	19,575 15 1	1,662 14 7	20·3	356 2 2	4·3	17,350
July 1, 1893	28,271 11 10	1,870 18 4	16·0	1,440 19 1	12·2	17,453
September 30, 1893	19,573 12 11	1,766 3 7	21·6	629 7 3	7·7	17,729
December 30, 1893	25,411 2 3	1,902 10 7	17·9	787 7 1	7·4	18,150
March 31, 1894	18,760 10 6	1,850 11 9	23·6	440 7 1	5·6	18,816
June 30, 1894	33,459 2 0	2,048 4 1	14·7	1,718 12 8	12·3	17,140
September 29, 1894	19,778 16 11	1,853 0 3	22·4	619 6 11	7·5	17,731
December 29, 1894	28,259 5 11	1,945 9 0	16·5	1,253 3 8	10·6	17,057
March 30, 1895	21,432 7 2	1,975 2 7	22·1	926 11 4	10·3	19,745
June 29, 1895	36,377 16 6	2,104 18 10	13·8	2,492 7 9	16·4	18,890
September 28, 1895	26,452 16 8	1,998 8 1	18·1	1,236 14 3	11·2	19,682
December 28, 1895	37,626 17 10	2,132 11 7	13·6	2,394 9 1	15·2	20,509
March 28, 1896	26,616 12 0	2,062 16 11	18·6	1,145 5 4	10·3	23,341
June 27, 1896	44,267 10 9	2,228 18 1	12·0	2,968 3 3	16·0	22,508
§December 26, 1896	76,487 14 8	4,459 6 5	13·9	4,177 3 8	13·1	23,002
§June 26, 1897	83,203 11 1	5,858 16 1	16·9	3,626 7 2	10·5	29,341
§December 25, 1897	87,307 11 6	7,369 9 6	20·2	2,939 9 5	8·1	32,494
§June 25, 1898	92,409 17 11	8,374 8 0	21·7	2,035 11 7	5·3	40,679
‡December 31, 1898	108,033 12 3	9,580 6 1	21·4	2,578 18 9	5·7	36,656
§July 1, 1899	119,104 15 9	9,545 12 11	19·2	4,840 16 8	9·7	39,772
Totals	1,400,623 7 2	101,563 6 7	17·4	59,111 9 6	10·1	....

†Fourteen weeks. ‡Twenty-seven weeks. §Half year.

PRODUCTIVE DEPARTMENTS.—Half-yearly Statement showing Expenses and Net Profit.
TAILORING FACTORY.

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
*November 4, 1882 ..	427 10 10	427 10 10	319 12 11	74·70	1 11 2	0·23	....	....	....
May 5, 1883 ..	1,083 16 1	1,083 16 1	790 8 0	72·94	19 0 5	1·75	....	....	187
November 3, 1883 ..	1,185 12 0	1,185 12 0	842 11 4	71·05	....	....	7 11 0	0·59	304
May 3, 1884 ..	1,051 9 0	1,051 9 0	740 0 2	70·40	11 18 5	1·04	....	....	344
November 1, 1884 ..	1,469 18 10	1,469 18 10	913 13 9	62·15	33 10 9	2·24	....	....	341
May 2, 1885 ..	1,499 9 9	1,499 9 9	917 12 1	61·10	16 1 9	1·06	....	....	327
October 31, 1885 ..	2,112 2 0	2,112 2 0	1,261 13 6	59·70	64 2 7	3·03	....	....	445
May 1, 1886 ..	2,602 2 9	2,602 2 9	1,556 13 2	59·80	34 13 0	1·30	....	....	326
†December 25, 1886 ..	3,650 15 10	3,650 15 10	2,289 17 2	62·71	....	....	21 3 4	0·57	485
June 25, 1887 ..	3,852 13 11	3,852 13 11	2,278 0 6	59·13	133 1 3	3·45	....	....	617
December 31, 1887 ..	4,226 12 8	3,892 18 11	2,569 7 4	66·00	....	....	208 9 3	5·34	424
June 30, 1888 ..	3,742 1 6	3,919 7 2	2,413 7 11	61·57	152 9 4	3·87	....	....	687
December 29, 1888 ..	4,589 14 3	4,719 19 4	2,897 10 0	61·39	356 14 1	7·54	....	....	1,083
June 29, 1889 ..	4,357 3 8	4,233 12 8	2,661 2 9	62·86	325 17 1	7·67	....	....	1,012
December 28, 1889 ..	4,892 19 11	5,165 18 0	2,919 0 10	56·51	609 5 0	11·79	....	....	1,280
June 28, 1890 ..	6,702 17 5	6,446 19 3	3,660 17 11	56·77	646 2 7	10·02	....	....	1,191
December 27, 1890 ..	7,166 9 4	7,691 2 10	4,171 19 9	54·23	699 16 9	9·10	....	....	1,564
June 27, 1891 ..	6,127 2 2	6,012 16 5	3,575 1 8	59·46	550 6 9	9·15	....	....	1,638

*Thirteen weeks. †Thirty-four weeks.

TAILORING FACTORY—*continued.*

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
December 26, 1891 ..	6,990 5 3	6,743 18 1	3,712 11 5	55·02	736 18 7	10·92	....	....	1,222
June 25, 1892 ..	7,444 4 7	7,283 9 10	4,186 6 0	57·47	867 10 0	11·90	....	....	1,218
‡December 31, 1892 ..	8,153 15 0	8,533 19 11	4,410 12 3	51·67	1,011 1 4	11·84	....	....	1,663
July 1, 1893 ..	8,039 8 5	8,263 11 8	4,697 14 5	56·84	1,026 10 2	12·41	....	....	1,782
December 30, 1893 ..	7,655 9 0	7,207 19 7	4,224 19 5	58·61	820 1 8	11·37	....	....	1,120
June 30, 1894 ..	8,143 3 4	8,011 18 7	4,673 12 4	58·83	1,083 4 8	13·51	....	....	1,133
December 29, 1894 ..	8,018 8 9	8,125 19 3	4,472 5 8	55·03	957 2 11	11·77	....	....	1,177
June 29, 1895 ..	9,212 1 2	9,191 3 11	5,053 18 6	54·98	1,444 18 8	15·72	....	....	1,175
December 28, 1895 ..	11,056 11 7	11,561 18 10	5,543 4 1	47·94	1,646 14 4	14·23	....	....	1,634
June 27, 1896 ..	10,780 9 3	10,313 3 10	5,674 6 0	55·01	1,599 12 11	15·51	....	....	1,410
December 26, 1896 ..	11,984 17 6	12,130 15 4	5,708 19 11	47·06	2,020 15 7	16·65	....	....	1,459
June 26, 1897 ..	11,488 1 6	11,107 12 8	6,113 3 10	55·04	1,884 13 7	16·96	....	....	1,307
December 25, 1897 ..	10,886 10 4	14,645 14 1	5,114 14 5	34·92	1,656 11 3	11·30	....	....	1,332
June 25, 1898 ..	9,170 5 2	8,913 16 5	5,034 17 4	56·49	1,419 16 4	15·93	....	....	1,517
‡December 31, 1898 ..	10,039 13 2	10,470 2 6	5,581 8 8	53·30	1,471 14 3	14·05	....	....	1,268
July 1, 1899 ..	10,812 4 5	10,384 7 5	5,584 1 11	53·77	1,768 18 5	17·03	....	....	1,200
Totals	210,616 0 4	213,907 17 6	116,565 6 11	54·49	25,070 15 7	....	237 3 7		
					237 3 7	....			
					24,833 12 0	11·60			

‡ Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—Half-yearly Statements.

SHIRT FACTORY.

Half Year ending	Transferred.	Production.	Expenses on Pr. duction.	Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
*November 4, 1882 ..	201 11 0	201 11 0	159 13 10	79·10	21 9 4	10·44	....	....	....
May 5, 1883 ..	415 17 10	415 17 10	348 1 9	83·85	13 13 2	3·13	....	....	12
November 3, 1883 ..	343 15 3	343 15 3	306 18 0	89·21	8 6 0	2·33	....	....	15
May 3, 1884 ..	459 18 4	459 18 4	381 12 5	83·00	17 15 6	3·70	....	....	22
November 1, 1884 ..	410 1 3	410 1 3	362 9 4	88·29	....	....	16 6 7	3·90	20
May 2, 1885 ..	768 16 11	768 16 11	500 2 1	65·10	50 17 10	6·51	....	....	55
October 31, 1885 ..	638 10 9	638 10 9	384 18 7	60·18	38 7 8	5·95	....	....	70
May 1, 1886 ..	764 15 0	764 15 0	461 14 1	60·34	25 8 10	3·27	....	....	43
†December 25, 1886 ..	1,128 1 11	1,128 1 11	670 18 5	59·39	46 14 6	4·07	....	....	48
June 25, 1887 ..	792 4 10	792 4 10	484 1 9	61·11	16 18 11	2·02	....	....	90
December 31, 1887 ..	839 11 6	858 1 2	549 9 0	63·98	23 6 6	2·68	....	....	92
June 30, 1888 ..	1,071 16 3	1,074 14 6	691 14 1	64·33	11 1 11	1·02	....	....	115
December 29, 1888 ..	1,296 19 3	1,306 0 6	885 13 2	67·76	....	....	24 7 5	1·83	112
June 29, 1889 ..	1,442 12 0	1,430 15 2	873 5 1	61·04	99 15 8	6·92	....	....	106
December 28, 1889 ..	1,355 5 8	1,373 13 3	855 2 2	62·27	110 13 8	8·01	....	....	119
June 28, 1890 ..	1,369 13 2	1,357 11 9	841 1 3	61·09	122 10 9	8·99	....	....	98
December 27, 1890 ..	1,488 19 11	1,495 2 10	940 0 2	62·87	131 5 9	8·76	....	....	72
June 27, 1891 ..	1,667 17 0	1,687 17 8	998 4 1	59·16	142 5 10	8·41	....	....	131

* Thirteen weeks. † Thirty-four weeks.

PRODUCTIVE DEPARTMENTS.—SHIRT FACTORY—*continued.*

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
December 26, 1891 ..	1,722 15 2	1,666 15 3	1,048 14 10	62·90	192 18 10	11·58	....	....	120
June 25, 1892 ..	1,547 4 6	1,570 7 10	1,021 3 4	65·03	141 6 3	8·98	....	....	215
‡December 31, 1892 ..	1,813 15 7	1,862 13 4	1,192 15 2	64·01	103 19 8	5·58	....	....	208
July 1, 1893 ..	1,875 9 4	1,816 19 3	1,216 18 9	66·97	147 2 7	8·09	....	....	146
December 30, 1893 ..	1,976 0 8	1,980 17 8	1,250 12 8	63·13	181 12 10	9·14	....	....	256
June 30, 1894 ..	2,109 9 2	2,114 11 6	1,328 8 7	62·82	216 1 10	10·21	....	....	372
December 29, 1894 ..	2,653 1 10	2,677 12 11	1,544 0 8	57·67	417 12 4	15·77	....	....	764
June 29, 1895 ..	3,344 5 1	3,357 18 7	1,871 6 3	55·73	....	....	17 14 0	0·53	802
December 28, 1895 ..	4,158 14 2	4,264 2 10	2,075 16 5	48·66	649 11 0	11·02	....	....	958
June 27, 1896 ..	4,563 2 0	4,545 19 4	2,298 13 7	50·57	613 0 3	13·48	....	....	1,531
December 26, 1896 ..	4,477 10 5	4,414 13 2	2,352 8 3	53·28	333 5 1	7·54	....	....	2,133
June 26, 1897 ..	5,439 12 7	5,418 18 2	2,841 4 2	52·42	273 9 5	5·03	....	....	1,753
December 25, 1897 ..	5,502 12 0	5,480 9 11	2,862 12 3	52·22	389 2 7	7·09	....	....	2,239
June 25, 1898 ..	5,826 8 7	5,888 12 7	3,132 6 5	53·19	113 18 11	1·93	....	....	2,190
‡December 31, 1898 ..	5,610 10 2	5,516 3 6	2,969 10 7	53·82	602 17 4	10·91	....	....	2,066
July 1, 1899 ..	6,421 4 0	6,526 5 10	3,400 7 1	52·10	....	....	21 19 6	0·33	1,899
Totals	75,498 3 1	93,610 11 7	43,101 18 3	46·04	5,076 10 9	....	80 7 6	....	....
					80 7 6				
					4,996 3 3	5·33			

‡ Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS—HALF-YEARLY STATEMENT.

SLOP FACTORY.

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£
*June 27, 1891	1,372 12 5	1,426 13 5	988 1 7	69·28	48 16 4	3·36	192
December 26, 1891	1,189 6 11	1,211 19 8	867 1 7	71·53	40 2 6	3·30	186
June 25, 1892	1,315 0 7	1,272 2 11	894 15 9	70·28	68 11 9	5·34	126
†December 31, 1892	1,477 0 3	1,358 1 6	955 16 10	70·32	67 2 6	4·93	100
July 1, 1893	1,576 14 2	1,481 6 11	1,005 13 4	67·86	36 10 0	2·43	434
December 30, 1893	1,582 3 6	1,558 0 2	996 11 6	63·92	5 7 4	0·32	476
June 30, 1894	1,665 5 10	1,608 10 1	1,082 2 11	67·28	111 14 11	6·96	825
December 29, 1894	1,828 1 6	1,826 8 2	1,027 14 9	56·24	1 18 3	0·10	410
June 29, 1895	1,640 7 2	1,633 7 5	1,198 15 9	73·36	117 16 11	7·16	314
December 28, 1895	1,872 19 3	1,907 14 11	1,324 18 2	69·48	128 13 3	6·71	251
June 27, 1896	1,821 18 11	1,756 15 5	1,261 5 3	71·81	166 16 7	9·45	94
December 26, 1896	2,022 9 10	2,104 19 0	1,407 2 2	66·84	232 12 5	11·02	203
June 26, 1897	1,994 10 6	2,038 9 4	1,454 15 11	71·34	170 18 0	8·39	374
December 25, 1897	2,088 3 3	2,099 16 9	1,500 1 3	71·42	123 19 1	5·90	338
June 25, 1898	2,248 13 7	2,248 4 0	1,568 5 6	69·75	255 5 3	11·34	277
†December 31, 1898	2,342 3 10	2,287 10 0	1,584 13 10	69·26	224 11 9	9·79	175
July 1, 1899	2,530 16 5	2,528 9 11	1,695 11 3	67·04	397 3 11	15·70	150
Totals	30,268 7 11	30,348 9 7	20,813 7 4	68·58	2,198 0 9	7·24	....

* Twenty-nine weeks. † Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.

MANTLE FACTORY.

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
June 27, 1891	994 10 2	1,005 7 3	734 6 4	73·03	....	....	86 17 4	8·64	203
December 26, 1891	1,330 1 0	1,352 19 4	870 3 6	64·30	....	....	52 3 0	3·84	350
June 25, 1892	1,157 19 8	1,165 4 11	809 12 10	69·44	....	....	107 17 7	9·26	324
*December 31, 1892	1,559 2 2	1,541 19 2	892 11 5	57·84	97 6 1	6·30	....	....	275
July 1, 1893	1,160 1 1	1,166 0 2	799 2 11	68·52	....	....	63 4 9	5·40	463
December 30, 1893	1,188 9 9	1,188 13 11	787 5 7	66·24	....	....	92 16 3	7·74	382
June 30, 1894	1,330 12 7	1,320 11 10	765 7 1	57·95	26 6 4	1·97	....	....	372
December 29, 1894	1,380 18 3	1,380 18 3	731 3 4	52·97	....	....	5 11 10	0·40	178
June 29, 1895	1,349 9 9	1,349 9 9	733 2 4	54·33	60 1 11	4·44	....	....	151
December 28, 1895	1,603 17 10	1,603 17 10	910 0 2	56·76	158 4 1	9·85	....	....	82
June 27, 1896	1,423 16 8	1,423 16 8	781 18 6	54·95	55 19 9	3·93	....	....	110
December 26, 1896	1,583 13 1	1,585 13 1	965 7 11	60·88	99 6 5	6·24	....	....	168
June 26, 1897	1,411 12 11	1,409 12 11	883 2 3	62·66	10 2 10	0·71	....	....	172
December 25, 1897	1,727 19 3	1,741 15 0	1,107 9 5	63·58	64 10 11	3·73	....	....	148
June 25, 1898	1,674 0 0	1,661 6 3	1,034 11 6	62·25	69 16 0	4·15	....	....	168
*December 31, 1898	2,418 19 1	2,439 8 7	1,448 18 7	59·36	268 14 10	10·98	....	....	134
July 1, 1899	2,362 19 10	2,355 6 8	1,419 8 4	61·52	208 14 1	8·83	....	....	168
Totals	25,658 3 1	25,692 1 7	15,703 12 0	61·12	1119 3 3	....	408 10 9	....	..
					408 10 9	....			
					710 12 6	2·76			

* Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.

HALF-YEARLY STATEMENT SHOWING

Half Year ending	Transferred.	Production.	Expenses.
	£ s. d.	£ s. d.	£ s. d.
*May 2, 1885	3,298 16 7	3,298 16 7	1,183 10 5
October 31, 1885	10,505 15 7	10,505 15 7	3,328 18 5
May 1, 1886	11,992 1 5	11,992 1 5	3,733 7 5
†December 25, 1886	21,824 5 3	21,824 5 3	6,391 18 6
June 25, 1887	14,863 9 5	14,863 9 5	4,957 18 9
December 31, 1887	18,993 10 11	18,971 7 5	6,080 12 7
June 30, 1888	14,421 8 10	15,456 0 7	5,506 7 8
December 29, 1888	23,752 4 3	23,911 13 1	8,056 18 10
June 29, 1889	22,306 15 8	24,829 5 11	8,341 2 10
December 28, 1889	27,323 7 10	29,256 15 8	10,581 3 6
June 28, 1890	27,000 12 3	28,621 13 5	10,465 6 5
December 27, 1890	30,407 10 8	30,503 13 1	11,379 17 10
June 27, 1891	32,049 7 0	36,406 9 8	12,584 0 3
December 26, 1891	39,077 18 1	36,629 1 10	13,442 9 3
June 25, 1892	37,242 4 10	38,374 15 3	14,141 17 0
‡December 31, 1892	45,510 0 11	47,150 2 10	17,174 4 2
July 1, 1893	47,638 17 8	52,446 7 4	18,043 6 7
December 30, 1893	51,067 8 4	46,571 6 2	18,989 11 10
June 30, 1894	46,791 19 6	51,486 16 6	19,553 9 6
December 29, 1894	55,931 9 10	59,200 17 5	21,447 5 10
June 29, 1895	55,806 6 10	60,418 2 5	22,869 19 4
December 28, 1895	66,638 6 11	71,710 15 0	23,958 14 5
June 27, 1896	33,329 19 7	25,833 19 5	15,864 14 10
December 26, 1896	75,052 14 4	81,530 17 3	25,886 17 4
June 26, 1897	71,058 8 4	75,864 19 3	27,945 10 4
December 25, 1897	86,513 19 11	84,579 3 1	30,646 10 2
June 25, 1898	78,951 16 4	87,503 12 9	30,670 5 6
‡December 31, 1898	82,733 8 1	75,295 13 10	31,020 12 8
July 1, 1899	92,125 9 9	90,378 8 2	33,602 0 4
Totals.....	1,224,209 14 11	1,255,416 5 7	457,848 12 6

* Thirteen weeks. Thirty-four weeks. ‡ Twenty-seven weeks.

BOOT AND SHOE FACTORY.

Expenses and Net Profit.

Rate per cent on Production.	Net Profit on Production.	Rate per cent on Production.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.		£ s. d.		£
35·87	....	....	47 9 10	1·42	2,176
31·68	240 19 3	2·28	....	....	3,435
31·12	247 1 10	2·05	....	....	4,042
29·28	867 3 2	3·97	....	....	4,020
33·35	124 7 11	0·83	....	....	7,350
32·04	1,013 15 11	5·33	....	....	5,406
35·62	687 14 1	4·44	....	....	7,886
33·69	1,072 2 11	4·48	....	....	11,869
33·59	1,041 3 7	4·19	....	....	12,588
36·16	1,509 19 4	5·15	....	....	15,890
36·56	1,867 10 10	6·52	....	....	19,920
37·30	1,744 10 11	5·71	....	....	17,349
34·56	1,635 2 2	4·49	....	....	24,080
36·69	1,996 18 7	5·45	....	....	18,292
36·85	2,115 17 8	5·51	....	....	18,006
36·42	2,743 19 7	5·82	....	....	18,220
34·40	4,070 11 6	7·76	....	....	24,660
40·77	3,360 15 11	7·21	....	....	20,696
37·97	3,378 12 5	6·56	....	....	27,948
36·22	4,052 10 0	6·84	....	....	27,177
37·85	3,701 7 10	6·12	....	....	33,558
33·41	5,678 11 5	7·91	....	....	35,328
61·40	1,177 12 4	4·55	....	....	44,226
31·74	5,296 14 10	6·49	....	....	34,019
36·83	4,330 3 2	5·70	....	....	40,484
36·23	3,474 2 2	4·10	....	....	38,889
35·05	4,665 18 0	5·33	....	....	42,058
41·19	3,070 0 1	4·07	....	....	41,010
37·18	3,878 5 11	4·29	....	....	40,225
36·47	69,043 13 4	....	47 9 10	....	....
	47 9 10	....			
	68,996 3 6	5·49			

PRODUCTIVE DEPARTMENTS.

CABINET

Half Year ending	Transferred.	Production.	Expenses on Production.
	£ s. d.	£ s. d.	£ s. d.
May 2, 1885	482 11 10	482 11 10	282 11 9
October 31, 1885	805 18 0	805 18 0	442 17 3
May 1, 1886	732 8 1	732 8 1	428 0 11
*December 25, 1886	1,499 5 10	1,499 5 10	776 10 10
June 25, 1887	1,202 14 1	1,202 14 1	639 11 8
December 31, 1887	1,286 2 6	1,354 12 11	739 17 5
June 30, 1888	1,418 3 10	1,452 12 5	714 18 7
December 29, 1888	2,671 15 2	2,871 0 11	1,595 3 9
June 29, 1889	3,275 7 8	3,409 18 0	1,835 15 3
December 28, 1889	4,379 0 5	4,362 1 6	2,186 9 9
June 28, 1890	6,137 16 9	6,116 7 10	3,260 18 5
December 27, 1890	7,200 18 4	7,312 2 1	3,855 8 1
June 27, 1891	6,976 13 6	7,340 2 9	3,931 9 3
December 26, 1891	7,702 14 3	7,806 11 0	4,065 6 4
June 25, 1892	7,556 16 4	7,784 17 1	4,251 2 6
†December 31, 1892	8,961 9 5	9,602 0 0	5,020 15 3
July 1, 1893	8,532 16 8	9,781 11 7	4,937 16 1
December 30, 1893	8,351 5 9	7,872 10 10	5,037 6 9
June 30, 1894	8,763 6 1	8,719 3 0	5,022 7 11
December 29, 1894	9,837 7 10	10,378 12 10	5,914 12 10
June 29, 1895	10,344 12 9	7,783 11 10	5,502 12 0
December 28, 1895	11,245 11 3	10,119 10 4	5,744 17 3
June 27, 1896	11,726 12 3	12,431 5 0	6,081 3 9
December 26, 1896	13,245 17 10	13,366 18 9	7,077 14 11
June 26, 1897	14,066 3 7	13,858 11 0	7,456 5 8
December 25, 1897	13,551 16 6	12,057 2 9	7,708 15 11
June 25, 1898	14,887 0 0	16,925 13 6	7,805 10 7
†December 31, 1898	18,490 10 3	16,158 0 3	9,581 18 8
July 1, 1899	17,841 10 4	19,375 9 7	9,928 19 10
Total.....	223,174 7 1	222,963 5 7	121,826 19 2

*Thirty-four weeks. †Twenty-seven weeks.

HALF-YEARLY STATEMENT.
WORKS.

Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.		£ s. d.		£
58·50	....	....	6 4 1	1·24	294
54·90	26 14 4	3·22	....	....	364
58·47	16 1 4	2·18	....	....	484
51·76	83 10 11	5·53	....	....	425
53·16	24 19 3	2·07	....	....	676
54·57	42 11 9	3·10	....	....	1,069
49·17	36 17 3	2·48	....	....	1,281
55·55	....	....	57 9 4	1·98	2,152
53·82	49 8 7	1·43	....	....	2,358
50·11	134 9 11	3·07	....	....	2,466
53·30	478 5 4	7·81	....	....	3,470
52·72	420 19 9	5·75	....	....	4,975
53·55	....	....	40 12 10	0·54	5,484
52·07	215 6 10	2·75	....	....	6,124
54·61	216 4 7	2·77	....	....	5,845
52·28	724 4 5	7·54	....	....	6,808
50·48	510 16 10	5·21	....	....	7,976
63·98	600 19 11	7·63	....	....	8,696
57·59	365 12 5	4·18	....	....	8,139
56·98	302 10 3	2·91	....	....	9,233
70·69	470 14 2	6·03	....	....	8,826
56·76	533 9 0	5·26	....	....	8,552
48·91	820 8 7	6·59	....	....	9,287
52·94	974 19 7	7·29	....	....	10,384
53·80	977 1 4	7·05	....	....	10,734
63·93	601 13 3	4·98	....	....	11,726
46·11	768 15 2	4·53	....	....	11,503
59·30	706 2 1	4·36	....	....	12,520
51·24	114 17 0	0·59	....	....	13,710
54·64	10,217 13 10	....	104 6 3	....	....
	104 6 3	....			
	10,113 7 7	4·53			

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.

HOSIERY FACTORY.

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
July 1, 1893 ..	2,832 0 11	2,724 0 3	963 12 7	35·35	....	....	43 8 2	1·57	785
December 30, 1893 ..	2,679 13 9	2,743 7 6	964 8 11	35·14	91 13 8	3·31	....	....	1,054
June 30, 1894 ..	2,564 10 9	2,490 14 3	942 13 7	37·83	56 19 7	2·29	....	....	885
December 29, 1894 ..	2,561 17 5	2,674 9 8	948 16 4	35·45	15 5 7	0·56	....	....	960
June 29, 1895 ..	3,098 12 8	3,071 16 9	1,026 4 0	33·40	195 9 0	6·38	....	....	817
December 28, 1895 ..	3,867 12 8	3,688 10 2	1,165 6 0	31·58	265 18 11	7·21	....	....	745
June 27, 1896 ..	4,111 11 6	4,151 14 9	1,288 2 10	31·02	387 17 10	9·32	....	....	858
December 26, 1896 ..	3,668 3 4	4,625 19 0	1,390 1 5	30·04	431 14 10	9·31	....	....	1,830
June 26, 1897 ..	5,292 2 2	4,563 12 5	1,643 9 0	36·00	46 10 9	1·01	....	....	1,204
December 25, 1897 ..	4,698 16 2	4,984 19 10	1,687 18 0	33·86	444 12 10	8·90	....	....	1,526
June 25, 1898 ..	4,793 9 11	5,473 3 9	1,706 11 2	31·17	226 1 0	4·13	....	....	2,033
* December 31, 1898 ..	5,109 18 11	5,060 3 8	1,792 15 2	35·41	158 3 7	3·12	....	....	2,190
July 1, 1899 ..	5,446 4 3	5,357 3 11	1,792 3 10	33·38	460 8 3	8·57	....	....	2,151
Totals.....	50,724 14 5	51,619 15 11	17,312 2 10	33·53	2,780 15 10	....	43 8 2	....	..
					43 8 2				
					2,737 7 8	5·30			

* Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.

BRUSH FACTORY.

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£
June 28, 1890..	1,357 19 8	1,510 1 0	599 3 8	39·66	144 15 1	9·53	823
December 27, 1890..	1,769 4 3	2,295 16 10	830 4 4	36·16	121 13 11	5·27	1,302
June 27, 1891..	2,003 6 8	2,244 13 0	913 12 6	40·68	168 15 11	7·48	1,775
December 26, 1891..	1,794 13 0	1,849 7 7	797 0 1	43·10	88 8 1	4·75	2,758
June 25, 1892..	2,092 6 4	1,975 19 11	838 18 8	42·46	67 8 4	3·39	2,281
*December 31, 1892..	2,399 5 10	2,454 14 4	1,082 17 0	44·13	128 15 7	5·25	2,991
July 1, 1893..	2,289 14 8	2,526 6 10	963 10 9	38·12	30 0 11	1·19	2,920
December 30, 1893..	1,941 6 5	1,416 6 5	804 5 10	56·78	160 12 3	11·30	2,971
June 30, 1894..	2,700 17 2	2,681 17 9	952 3 6	35·49	169 8 2	6·30	2,844
December 29, 1894..	2,158 14 9	2,090 0 9	915 15 8	43·78	185 9 8	8·85	3,277
June 29, 1895..	2,867 5 1	2,942 1 3	1,018 17 0	34·63	316 15 4	10·74	2,842
December 28, 1895..	2,500 8 0	2,257 1 11	944 11 11	41·82	353 12 5	15·64	3,847
June 27, 1896..	3,172 11 6	3,454 12 2	1,082 4 8	31·32	101 16 2	2·95	3,772
December 26, 1896..	2,722 8 0	2,441 1 8	1,066 8 6	43·67	230 18 1	9·46	4,067
June 26, 1897..	3,483 1 0	3,432 8 11	1,107 5 1	32·22	524 0 5	15·26	3,785
December 25, 1897..	2,821 16 10	3,327 14 0	1,431 0 10	43·01	15 15 3	0·45	5,056
June 25, 1898..	3,532 19 10	3,588 19 10	1,457 18 6	40·62	65 0 4	1·81	4,323
*December 31, 1898..	2,929 15 6	2,539 3 6	1,139 1 11	44·86	38 8 2	1·49	5,227
July 1, 1899..	3,960 1 9	3,644 18 10	1,394 19 4	38·27	494 15 9	13·55	3,972
Totals	48,497 16 3	48,673 6 6	19,339 19 9	39·73	3,406 9 10	7·00	....

* Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.—PRINTING WORKSHOP.

Half Year ending	Transferred.			Production.			Expenses on Production.			Rate per cent.	Net Profit on Production.			Rate per cent.	Stocks.
	£	s.	d.	£	s.	d.	£	s.	d.		£	s.	d.		£
*December 31, 1887..	649	14	2	653	15	5	347	14	7	53·13	41	19	10	6·43	175
June 30, 1888..	1,466	11	6	1,475	13	9	705	16	7	47·79	117	10	5	7·93	180
December 29, 1888..	1,648	5	10	1,645	18	9	775	0	9	47·11	168	12	0	10·21	228
June 29, 1889..	1,770	9	10	1,842	0	2	1,000	3	1	54·28	115	6	1	6·24	425
December 28, 1889..	2,084	17	7	2,143	11	9	1,126	4	6	52·54	146	14	5	6·81	602
June 28, 1890..	3,093	3	5	3,170	2	11	1,526	11	10	48·10	291	9	3	9·17	706
December 27, 1890..	4,148	16	11	4,008	9	9	1,770	11	1	44·16	200	9	5	4·99	832
June 27, 1891..	4,096	9	8	4,074	16	11	1,796	19	0	44·10	245	16	10	6·03	1,223
December 26, 1891..	4,921	14	11	5,084	10	0	2,059	18	5	40·51	472	6	10	9·28	1,341
June 25, 1892..	5,730	6	5	5,867	10	10	2,405	9	7	40·99	596	19	0	10·17	2,144
†December 31, 1892..	6,913	1	10	6,866	7	6	2,979	16	5	43·38	290	3	4	4·22	2,058
July 1, 1893..	7,452	17	5	7,437	13	11	3,041	11	5	40·89	797	17	0	10·73	1,850
December 30, 1893..	7,520	17	6	7,374	7	0	2,972	7	8	40·30	749	19	9	10·17	1,584
June 30, 1894..	7,078	10	1	7,101	4	8	2,924	18	6	41·19	678	12	2	9·54	1,677
December 29, 1894..	8,414	1	5	8,440	6	9	3,034	17	8	35·94	1,479	13	5	17·52	1,688
June 29, 1895..	8,414	2	5	8,474	17	6	3,357	10	0	39·61	1,151	18	10	13·59	1,602
December 28, 1895..	9,644	18	2	9,782	1	0	3,692	4	9	37·74	1,237	4	6	12·64	2,174
June 27, 1896..	11,139	5	5	11,037	2	10	3,916	0	7	35·48	1,402	5	6	12·70	2,095
December 26, 1896..	10,947	15	7	10,989	6	9	4,119	12	10	37·48	1,633	10	4	14·86	2,715
June 26, 1897..	11,655	8	8	11,798	3	0	4,648	16	3	39·39	1,481	7	10	12·55	3,182
December 25, 1897..	12,747	5	2	12,865	18	7	4,811	17	8	37·39	1,910	4	11	14·84	3,573
June 25, 1898..	14,033	9	7	13,998	6	9	5,102	0	2	36·45	2,566	5	9	18·33	3,729
†December 31, 1898..	14,268	11	2	13,986	15	0	5,189	11	6	37·10	2,338	7	2	16·71	2,312
July 1, 1899..	14,263	12	10	14,628	13	4	5,347	3	4	36·55	2,400	19	4	16·41	2,780
Totals	174,104	7	6	174,747	14	10	68,652	18	2	39·28	22,515	13	11	12·88	....

*Thirteen weeks. †Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.

PRESERVE WORKS.

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£
*December 27, 1890..	11,200 5 8	12,816 4 7	1,036 0 6	8·08	681 6 4	....	3,091
June 27, 1891..	8,633 11 2	7,615 18 9	1,066 0 9	14·00	592 6 2	7·77	5,980
December 26, 1891..	20,734 0 8	28,495 2 7	1,934 11 8	6·78	1,147 2 0	4·02	9,042
June 25, 1892..	18,770 4 10	10,410 16 11	2,010 2 5	19·30	1,063 13 3	10·21	11,041
†December 31, 1892..	23,729 11 5	40,212 8 7	3,041 17 4	7·56	1,742 14 3	4·33	21,380
July 1, 1893..	26,389 17 10	21,419 16 11	2,810 5 2	13·11	757 10 6	3·53	16,566
December 30, 1893..	25,696 12 10	27,306 10 9	3,773 3 8	13·81	1,462 7 8	5·35	20,553
June 30, 1894..	29,166 6 6	24,276 15 1	4,045 16 7	16·66	1,697 6 2	6·99	14,792
December 29, 1894..	27,596 1 11	37,606 16 3	3,971 1 1	10·55	2,457 4 9	6·53	17,925
June 29, 1895..	29,558 10 10	22,581 4 1	3,884 12 9	17·20	1,293 7 9	5·72	14,012
December 28, 1895..	26,537 16 2	37,833 12 4	4,215 12 10	11·14	2,545 10 7	6·72	22,205
June 27, 1896..	30,712 12 10	21,656 2 4	3,983 9 2	18·39	721 3 9	3·32	17,706
December 26, 1896..	29,558 10 3	41,389 4 2	4,292 17 6	10·37	3,472 19 8	8·39	22,204
June 26, 1897..	33,156 18 11	22,006 14 8	3,865 0 3	17·56	3,613 12 5	16·42	16,049
December 25, 1897..	40,333 1 8	48,079 17 4	4,482 9 6	9·32	4,901 1 4	10·19	16,517
June 25, 1898..	35,643 18 6	25,415 15 6	4,547 9 3	17·89	4,734 15 6	18·62	10,092
†December 31, 1898..	36,278 1 6	52,560 15 3	5,479 15 7	10·42	3,024 1 5	5·75	22,655
July 1, 1899..	34,588 7 1	22,184 11 0	4,898 15 9	22·07	2,433 3 4	10·96	11,584
Totals	488,284 10 7	503,868 7 1	63,339 1 9	12·50	38,341 6 10	7·60	....

* Twenty-eight weeks. † Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.
CONFECTIONERY WORKS.

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
Dec. 26, 1891....	3,166 2 9	3,278 7 3	413 0 10	12·59	95 10 10	2·89	....	....	439
June 25, 1892....	2,185 15 6	2,073 11 0	295 12 1	14·23	45 6 7	2·17	....	....	344
*Dec. 31, 1892....	3,293 18 0	3,991 17 5	987 12 1	24·72	....	....	494 16 7	12·40	1,234
July 1, 1893....	5,194 4 3	5,157 1 5	1,458 8 6	28·27	....	....	238 10 2	4·61	1,175
Dec. 30, 1893....	5,700 8 3	5,819 17 4	1,443 5 10	24·79	....	....	198 19 3	3·42	1,619
June 30, 1894....	6,796 19 3	6,741 14 1	1,491 11 0	22·11	288 18 2	4·28	....	....	1,987
Dec. 29, 1894....	7,246 15 4	8,056 18 4	1,574 4 11	19·53	429 8 10	5·32	....	....	1,495
June 29, 1895....	6,373 4 0	6,460 14 3	1,552 18 10	24·04	249 3 10	3·58	....	....	1,968
Dec. 28, 1895....	6,456 10 3	6,325 8 10	1,517 0 6	23·98	291 19 10	4·61	....	....	1,216
June 27, 1896....	6,827 11 4	6,590 11 0	1,550 4 3	23·52	19 10 3	0·28	....	....	1,150
Dec. 26, 1896....	7,365 14 1	7,304 8 5	1,504 12 11	20·59	508 3 7	6·95	....	....	824
June 26, 1897....	7,254 5 4	7,342 3 3	1,550 15 0	21·11	758 12 5	10·32	....	....	1,086
Dec. 25, 1897....	7,591 12 1	7,596 18 6	1,641 8 1	21·60	586 17 11	7·72	....	....	1,192
June 25, 1898....	6,684 8 2	6,629 10 3	1,680 14 2	25·34	234 10 2	3·53	....	....	1,281
*Dec. 31, 1898....	7,559 11 8	7,566 13 2	1,896 10 4	25 05	132 11 8	1·74	....	....	1,060
July 1, 1899....	7,623 2 6	7,819 10 7	1,771 6 1	22 65	551 13 11	7·04	....	....	1,424
Totals.....	97,320 2 9	98,755 5 1	22,329 5 5	22·61	4,192 8 0	....	932 6 0	....	..
					932 6 0				
					3,260 2 0	3·30			

* Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.

TOBACCO WORKS.

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£
Dec. 26, 1891.....	15,510 4 8	21,326 17 2	1,704 19 6	7·99	651 11 11	3·05	8,958
June 25, 1892.....	25,947 5 8	26,056 14 0	2,253 18 3	8·65	713 4 9	2·73	9,233
*Dec. 31, 1892.....	33,385 18 6	32,859 15 4	2,512 17 8	7·64	1,725 6 10	5·25	13,461
July 1, 1893.....	33,515 17 8	32,756 15 0	2,668 3 5	8·14	1,216 10 8	3·71	18,572
Dec. 30, 1893.....	33,886 8 8	35,071 17 7	2,547 4 9	7·26	1,426 13 6	4·06	15,580
June 30, 1894.....	35,212 6 2	35,751 16 2	2,561 10 8	7·16	494 10 7	1·38	14,063
Dec. 29, 1894.....	38,795 13 3	39,137 16 4	2,733 0 6	6·98	1,105 1 11	2·82	17,381
June 29, 1895.....	46,043 6 10	45,896 15 6	3,054 13 1	6·65	1,650 18 2	3·60	16,783
Dec. 28, 1895.....	50,577 16 6	50,093 4 11	3,116 5 9	6·22	2,059 12 2	4·11	16,498
June 27, 1896.....	56,764 5 3	58,597 16 9	3,526 17 0	6·02	3,159 11 7	5·39	23,896
Dec. 26, 1896.....	58,848 8 2	59,269 6 0	3,569 4 0	6·02	3,400 4 1	5·73	25,478
June 26, 1897.....	62,124 11 1	61,743 3 7	3,814 4 6	6·17	3,937 4 4	6·37	23,790
Dec. 25, 1897.....	62,804 8 9	63,855 2 5	4,048 19 2	6·34	3,503 17 1	5·48	37,912
June 25, 1898.....	62,821 13 3	62,560 7 10	4,275 18 2	6·83	3,104 17 0	4·96	30,588
*Dec. 31, 1898.....	64,154 16 2	63,687 17 8	4,444 16 1	6·97	4,820 0 1	7·56	36,287
July 1, 1899.....	63,044 15 3	63,819 12 11	4,385 12 2	6·87	5,390 5 9	8·44	35,905
Totals.....	743,437 15 10	752,484 19 2	51,218 4 8	6·80	38,359 10 5	5·09	....

* Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.

CHANCELOT FLOUR MILLS.

Half Year ending	Sales and Transfers.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss on Production.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
Dec. 29, 1894 ..	23,102 14 7	38,609 14 5	4,592 10 6	11·89	....	..	1,348 17 6	3·49	51,096
June 29, 1895 ..	113,158 15 6	105,711 16 11	10,065 16 10	9·52	....	..	3,033 19 3	2·87	40,335
Dec. 28, 1895 ..	119,419 12 9	120,530 16 6	11,143 19 0	9·24	1,033 0 7	0·85	....	..	75,399
June 27, 1896 ..	117,422 6 5	130,432 3 1	12,312 12 3	9·43	2,326 7 9	1·73	....	..	71,974
Dec. 26, 1896 ..	170,445 18 8	174,638 17 1	13,640 4 11	7·81	4,568 8 5	2·61	....	..	50,438
June 26, 1897 ..	206,330 9 8	210,180 1 7	13,490 0 0	6·41	2,406 10 6	1·14	....	..	42,342
Dec. 25, 1897 ..	301,604 14 6	294,175 14 7	13,477 9 4	4·57	3,298 15 8	1·12	....	..	53,551
June 25, 1898 ..	274,998 2 1	287,049 1 4	13,338 3 2	4·64	2,519 2 8	0·87	....	..	48,690
*Dec. 31, 1898 ..	232,508 6 0	227,878 15 8	13,810 6 3	6·06	2,903 13 3	1·27	....	..	49,385
July 1, 1899 ..	218,017 2 6	209,986 19 2	12,945 1 7	6·16	1,554 6 8	0·74	....	..	28,359
Totals	1,776,600 9 9	1,799,194 0 4	118,816 3 10	6·60	20,610 5 6	..	4,382 16 9	..	....
					4,382 16 9	..			
					16,227 8 9	0·90			

*Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.

ETTRICK TWEED MILLS.

Half Year ending	Transferred.	Production.	Expenses on Production.	Rate per cent.	Net Profit on Production.	Rate per cent.	Net Loss on Production.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
*June 27, 1896 ..	7,171 12 1	4,317 13 0	1,606 16 3	37·20	46 9 1	1·06	....	..	7,403
Dec. 26, 1896 ..	11,634 0 10	13,853 4 4	4,796 5 5	34·62	106 16 11	0·76	....	..	12,258
June 26, 1897 ..	15,385 7 0	14,008 11 4	4,940 7 8	35·26	....	..	94 9 3	0·67	10,393
Dec. 25, 1897 ..	14,733 16 3	15,974 7 11	5,515 11 3	34·55	538 4 7	3·36	....	..	15,292
June 25, 1898 ..	17,028 5 11	17,885 0 11	5,304 11 0	29·65	468 19 2	2·62	....	..	14,764
†Dec. 31, 1898 ..	17,775 17 1	22,281 13 8	5,175 18 3	23·23	335 17 0	1·50	....	..	12,475
July 1, 1899 ..	15,681 4 0	15,681 6 3	5,355 6 6	34·15	....	..	355 2 4	2·26	15,483
Totals	99,410 3 2	104,001 17 5	32,694 9 4	31·43	1,496 6 9	..	449 11 7	..	....
					449 11 7	..			
					1,046 15 2	1·00			

* Nine weeks. † Twenty-seven weeks.

Employés.

NUMBER OF EMPLOYÉS, SEPTEMBER 30TH, 1899.

Distributive Departments.			Collective Totals.
General Office	Glasgow	144	
Grocery	„	109	
Stationery	„	9	
Potato	„	10	
Cattle Buying	„	1	
Coal	„	1	
Drapery, Mantle and Millinery Workrooms	„	270	
Boot	„	58	
Furniture	„	100	
Carting and Fodder	„	139	
Cleaners	„	12	
Dining-room	„	12	
„	Shieldhall	16	
			881
Leith		83	
Kilmarnock		25	
Dundee		3	
Enniskillen and Creameries		62	
Edinburgh—Sample-room		18	
Greenock—Sugar Forwarding		1	
			192
Productive Departments.			
Boot Factory, Currying, &c.	Shieldhall	992	
„ „ Parkview	Glasgow	268	
Clothing Factory	Shieldhall	319	
„ „	Glasgow	117	
Shirt and Underclothing Factory	Shieldhall	239	
Hosiery Factory	„	100	
Slop „	„	93	
Mantle „	Glasgow	71	
Waterproof Factory	„	72	
Umbrella Factory	„	7	
Saddlers' Shop	„	9	
Cabinet Factory	Shieldhall	291	
			2,578
Carried forward			3,651

NUMBER OF EMPLOYÉS, SEPTEMBER 30TH, 1899.

PRODUCTIVE DEPARTMENTS—continued.			Collective Totals.
Brought forward			3,651
Brush Factory	Shieldhall	35	
Tinware „	„	51	
Mechanics' Department	„	54	
Cartwright Shop	„	30	
Printing Department	„	195	
Preserve and Confection Factory	„	216	
Coffee Essence „	„	23	
Pickle „	„	62	
Drug Department	„	75	
Tobacco Factory	„	127	
Miscellaneous	„	8	
Sausage Factory	Glasgow	17	
Ham Curing	„	28	
Aërated Water Factory	„	23	
Chancelot Mills	Edinburgh	99	
Junction „	Leith	49	
Ettrick „	Selkirk	145	
Soap Works	Grangemouth	64	
Farm, Carbrook Mains	Larbert	11	
Creamery	Wigtown	21	
			1,333

BUILDING DEPARTMENT.

GLASGOW—Joiners		54	
Bricklayers		15	
Hewers		6	
Labourers		62	
Coopers		2	
Slaters		3	
Plasterers		7	
Plumbers		17	
Painters		21	
Management		7	
			194
EDINBURGH AND WIGTOWN—Joiners		8	
Masons		2	
Slaters		2	
Plasterer		1	
Labourers		10	
Painter		1	
Plumber		1	
			25
Total			5,203

Bonus to Labour.

The payment of bonus, since its institution in 1870, has taken three different forms. Till 1884 employés received, on wages earned, double the rate per £ allocated as dividend on members' purchases. This arrangement was then replaced by one which set aside the double claim of the employé, and, recognising a difference between workers in the distributive and productive departments, established a differential rate. The distributive employés received the same rate of bonus as was the rate of dividend on members' purchases, and the rate of bonus to productive workers was determined by the net aggregate profit made in the manufacturing departments only. This arrangement continued till 1892, when the system of bonus payment was again revised. Hitherto the whole bonus allocated had been paid over; but the present system, which allows a uniform rate to both distributive and productive departments, requires that one-half of each worker's bonus be retained and put to his credit, forming a special fund, called the Bonus Loan Fund. This capital bears interest at the rate of 3 per cent per annum, and is not withdrawable until the expiry of three months after leaving the service of the Society, unless with the consent of the Committee.

EMPLOYÉ-SHAREHOLDERS.

Simultaneously with the introduction of the present scheme of bonus, arrangements were made to permit of employés becoming shareholders in the Society. The number of shares held by one individual may range from five to fifty of twenty shillings each, and the paid-up capital bears interest at the rate of 5 per cent per annum. By the rules of the Society, the shareholding employés are entitled to send one representative to the quarterly meeting, and one for every 150 employés who become shareholders. At the present time there are 301 shareholders, which permits of a representation of three at the business meetings of the Society.

The following statements show the amount of bonus paid each year since 1870, and the total amount thus paid to employés, also the Bonus Loan Fund and the Employé-Shareholders' Fund at 1st July, 1899:—

FIRST BONUS SCHEME.

	Amount. £ s. d.	Average Rate per £. s. d.
Quarter ending November 19, 1870	5 11 0	0 8
Year " " 18, 1871	40 10 0	0 10½
" " " 16, 1872	52 7 0	0 9½
" " " 15, 1873	90 1 8	0 9½
" " " 14, 1874	116 9 0	0 8½
" " " 13, 1875	109 15 4	0 8
" " " 4, 1876	108 13 4	0 8
" " " 3, 1877	121 10 0	0 8
" " " 2, 1878	147 17 0	0 8
" " " 2, 1879	203 3 0	0 9½
" " October 30, 1880	322 9 3	1 1
" " November 5, 1881	368 3 8	1 0
" " " 4, 1882	453 9 1	0 11
" " " 3, 1883	542 3 0	0 11½
" " " 1, 1884	484 2 6	0 9½

SECOND BONUS SCHEME.

Year ending	Distributive Amount. £ s. d.	Rate per £. s. d.	Productive Amount. £ s. d.	Rate per £. s. d.
October 31, 1885	483 13 1	0 6¾	——	—
December 25, 1886	873 0 6	0 6½	——	—
" 31, 1877	603 0 2	0 6¾	315 2 1	0 4
" 29, 1888	683 12 1	0 6¼	628 11 7	0 7
" 28, 1889	833 16 10	0 6½	1,016 14 10	0 8½
" 27, 1890	1,139 6 10	0 7	1,752 10 6	0 11
" 26, 1891	1,208 9 3	0 6¾	1,802 14 9	0 9
" 31, 1892	1,813 8 3	0 6½	2,320 11 4	0 9

Present Bonus Scheme.

	£	s.	d.	Rate per £. s.	d.
Year ending December 30, 1893	3,775	15	0	0	6¼
„ „ „ 29, 1894	3,563	18	9	0	6
„ „ „ 28, 1895	4,634	14	0	0	7½
„ „ „ 26, 1896	5,965	17	9	0	7¾
„ „ „ 25, 1897	7,431	8	8	0	8
„ „ „ 31, 1898	7,017	2	6	0	7
Half Year ending July 1, 1899	4,399	17	4	0	8

Total amount paid as bonus to 1st July, 1899 ..... £55,429 10 11

Amount of Bonus Loan Fund at 1st July, 1899 ..... 10,424 15 11

Employé-Shareholders' Fund at 1st July, 1899—301 employés holding 5,154 shares, with £3,906. 1s. 8d. paid up.

The Needs of Secondary Education.

BY H. DE B. GIBBINS, LITT.D., M.A.,

Sometime Scholar of Wadham College and University Prizeman, Oxford.

INTRODUCTORY.

ALTHOUGH at the present time everybody who has anything to do with secondary education is convinced that its needs are both many and urgent, it is remarkable that this conviction has been a matter of comparatively slow growth. It is now nearly forty years ago since the first Royal Commission on Secondary Education sat, in 1861, to take evidence as to the condition of the nine great public schools (viz., Eton, Winchester, Westminster, Charterhouse, St. Paul's, Merchant Taylors', Harrow, Rugby, and Shrewsbury); and, though these forty years have been productive of remarkable changes in the political, social, and commercial life of the nation, it is only quite recently that our legislators have awakened to the fact that the needs of secondary education have grown with the times, and that the time is now fully ripe to begin to meet them.

COMMISSIONS OF INQUIRY.

The Commission of 1861, just referred to, only touched those few schools which formed then, as they form now, the apex of the pyramid of English education. These schools, admirable as they were, and still are, only represented a fraction of the great whole of secondary instruction. They provided education only for a favoured few who could afford to pay high fees and to mix with schoolfellows of comparatively high social standing, and they still provide it on the same lines. It was felt that another inquiry was necessary, the scope of which should include the hundreds of endowed grammar schools, both small and large, which had been

founded at various dates, going back into the mists of mediæval antiquity, by beneficent individuals or societies, and which for several centuries had furnished the main bulk of our secondary tuition. Accordingly a second Commission was appointed at the close of the year 1864, and it issued in 1867 a very excellent report, dealing with certain reforms thought to be necessary in the application and management of these old endowments, and making certain suggestions for the establishment of definite authorities to supervise the area of instruction covered by these schools. It is curious and instructive to notice that these suggestions of 1867 included (1) a Central Authority for Education, (2) a Local or Provincial Authority, and (3) a Central Council for the arrangement of school examination and inspection. It has needed the experience of thirty years to convince people that a central authority is absolutely necessary, but meanwhile a well-known Act, entitled "The Endowed Schools Act, 1869," constituted what since that time has partially served the purpose of a central authority, viz., the Endowed Schools Commission, soon afterwards merged into the better known "Charity Commission," which still exists.

THE CHARITY COMMISSION.

The object of this permanent Commission has been to frame schemes of management for all schools which possess an endowment; and by these schemes great reforms and improvements have been quietly effected in many old institutions, whose usefulness has been further extended and whose work has thus been directed in a definite manner.

But, although more than 900 such endowments have been dealt with by the Charity Commission, there still remain not a few schools which are outside its scope, while in various other cases the limited powers of the Commission have not been able to deal completely with every case.

Such as it is, however, the Charity Commission has remained till the present time as the sole central authority for secondary education. It is only empowered to deal with a certain class of schools, viz., those which derive funds from some ancient endowment and therefore it has come to pass that it now by no means controls or takes cognisance of the whole field of modern educational developments. None of the other recommendations of the Commission of 1864–67 were carried into effect, and the result is that other authorities and agencies are now found covering the ground over which the authority of the Charity Commission does not extend. This is especially the case in many of the great centres of population, many of which have grown into towns with

thousands of inhabitants, who have no old endowed schools in their midst to give a higher education to those who need it, or who have found the old foundations quite inadequate to meet the many needs and difficulties which have arisen in modern times. The city of Liverpool is a remarkable example of a modern town which possesses absolutely no endowments for secondary education, but where secondary education has necessarily been provided by various agencies quite outside the scope of the Charity Commission.

PRESENT AGENCIES OF EDUCATION: BOARD SCHOOLS.

Before going further it will be useful, therefore, to see what agencies now exist in our country for secondary instruction apart from the few great public schools alluded to above and the grammar schools, some 600 in number, possessing ancient but often insufficient endowments. We notice first of all the Higher Grade Board Schools—institutions which, although they give instruction in subjects that are avowedly neither elementary nor contemplated by the original promoters of elementary education, nevertheless evidently meet a want felt by a very large class of the community. These higher grade schools are in reality secondary schools, though by no means of the highest type, but such as they are they fill a certain void in the educational area. They are nearly all on the same model, viz., schools of science, because their curricula are framed to meet the wants of the Science and Art Department of South Kensington, being so framed not because their promoters believe that instruction in science must always and everywhere be the best form of instruction possible, but simply because the State gives grants in money for the teaching of science, and it is from these grants that a large portion of the maintenance of such schools is derived.

THE SCIENCE AND ART DEPARTMENT.

The next agency is this Science and Art Department to which allusion has just been made. The ostensible and main object of this department (whose grants date back to 1837) was to promote proper instruction in subjects coming under the general heading of science and art. For every pupil who attends a regular course of lessons and passes certain of its examinations the Department pays a grant of money, which, in the case of an institution such as a technical school or a grammar school, with many classes, often amounts to a considerable sum per annum. The quantity of teaching thus given in science and art subjects has consequently increased greatly, and the quality has also been vastly improved, while many schools have found the Department's money a valuable

addition to their yearly income. The Department also allows schools to be started, as distinct from mere separate classes in one or more subjects, and these schools work to a general scheme of education in which science forms the predominant feature, receiving large grants to enable them to carry on their work. The payments now made by the Science and Art Department amount to about £143,000 a year, which is received by schools of all sorts and descriptions, from the old endowed grammar schools whose senior scholars proceed to the Universities, down to the humblest elementary school whose pupils may be drawn from the slums. The work done by this Department has been of a truly national character, and has had a most important influence on English education; but, unfortunately, as science and art are the only subjects for which grants may be paid, the result has been that a large mass of educational effort has been too exclusively directed in one groove to the exclusion of other equally useful teaching in foreign languages and commercial subjects.

UNIVERSITY COLLEGES.

A third agency, the influence of which has been less direct but is nevertheless very far-reaching, may be noted in the rise of what are called local Universities, or "University Colleges," in most of our large towns. These have grown up in the last twenty years, or less, and provide in cities like Manchester, Liverpool, Birmingham, and Nottingham a kind of education approximating to the University type, though in many cases really quite below a University standard and only parallel to that given equally well by the higher teaching of local grammar schools. The University Colleges of Manchester, Liverpool, and Leeds are connected together so as to form the Victoria University, which grants its own degrees, while other colleges work up to the degree standard of the London University. The London University it may be noted is, strictly speaking, not a University in the ordinary sense, as it provides no teaching or place of teaching, but is merely an examining body. It has, however, done excellent work in fixing a sound general standard of knowledge of University grade, to which any single student or any educational institution may work. The local University Colleges have rapidly increased both in numbers and popularity, and though their standard is necessarily low at present, they will probably in time raise it to a higher level and approximate more closely to the numerous local Universities which are so marked a feature of German education. At present their main danger seems to be a greater regard for number of students than for quality of teaching and learning.

THE COUNTY COUNCILS.

There remains a fourth agency of a most important character, namely, the agency of the County Councils. Under the Technical Instruction Act of 1889 the Council of any County or County Borough was empowered to levy a rate not exceeding one penny in the pound for the support or aid of technical or manual instruction; but this rating power was not very widely employed, and probably no very great impulse would have been given to education thereby until public opinion was more ready to consent to the imposition of further burdens upon the rates. But soon funds for this purpose were forthcoming from another source. In 1890 technical instruction was named in the Local Taxation Act of that year as one of the purposes to which local authorities might apply the money paid over to them by the Exchequer out of the beer and spirit duties. This "whisky money," as it is popularly called, has, therefore, become a most important factor in the promotion of technical education by local authorities, and though in some cases it has possibly been applied "not wisely but too well," it has on the whole been of immense benefit to the cause of education generally. From it County and City Councils now pay grants not only for the promotion of special instruction in definitely technical subjects, but also for the general support of local institutions, such as insufficiently endowed secondary schools, in order to enable them to perform their educational work more efficiently.

PRIVATE EFFORT: COMPANY SCHOOLS.

The agencies which we have so far noted have all been of a public nature. The Charity Commission, the Science and Art Department, and the County Councils are all of a public character. Their influence and work have influenced English education most widely during the last ten or twenty years. But there has also been a certain amount of private effort which, although it may be small compared with the work of public bodies, has nevertheless had an appreciable influence in certain directions. Thus we have the large boarding schools started by companies of shareholders, and known as proprietary schools, which are usually of one of three kinds: (1) a purely philanthropic institution which makes no return to those who have advanced money for the original building; (2) a company paying a limited interest or dividend (the limit being usually 5 per cent); or (3) a company paying a dividend in the ordinary way varying with the annual profits. To the first class belong such well-known boarding schools as Clifton, Marlborough, and Rossall, or a day school like Liverpool College. The most important example of the second class is to be found rather in the field of girls'

education than of boys', for the Girls' Public Day Schools Company has established in various towns some thirty-six schools which have been of great benefit to the locality. They only contain, however, about 7,000 girls, an infinitesimal fraction of the whole number of girls of school age in the country. The Church Day Schools Company has also been very successful, and has established twenty-four schools for girls. It is curious to note, however, that these very same companies have by no means been so successful in the few schools which they have established for boys, but this may possibly be because the number of endowed and public schools already provided for boys is so far in excess of those for girls. There are not many proprietary schools of importance in the third class, viz., those which pay a varying dividend out of profits, and perhaps it is as well that there should not be.

PRIVATE SCHOOLS KEPT BY INDIVIDUALS.

But there remains one part of the field of secondary education which we have not yet considered, but which contains a very large proportion indeed of the number of secondary scholars of the country, both boys and girls, but especially the latter. Private schools flourish in England to an extent almost unknown elsewhere. Their number has been estimated as high as 15,000, while the lowest estimate is 10,000, and, although the decrease in the number of such schools has been considerable since 1868, they still form an important item in the total of English education. The average number of pupils attending them is given by the Royal Commission of 1895 (Report, Vol. I., p. 51) as forty to fifty for each school, so that, taking the lowest estimate, there must be 400,000 children of school age attending them, and possibly as many as 750,000. A large number of such schools are engaged in preparing boys for entrance into the great public schools, and as their arrangements must, therefore, follow more or less the lines of the schools for which they prepare, these preparatory schools may be considered the most satisfactory type of private effort. There are also a few good private boarding schools managed on public school lines. But it is to be feared that a great number of the remainder are hardly satisfactory as educational institutions, and many are most inferior. The Commission of 1895 Report remarks: "Though the worst type of private schools is rarer than it was thirty years ago, yet the general result of our inquiries has been to show that a large proportion of these schools are unsatisfactory." Moreover, it is pointed out that a large number of private schools which profess to be secondary are really only elementary in the kind of instruction which they give, and it is certain that the elementary teaching

thus given is not so good as that of "elementary" schools. But the question of private schools will recur later when we come to deal with the needs of secondary education.

So far we have merely surveyed the existing agencies which provide it, or which attempt to do so. We have noted that the typical secondary school, as it may be termed, is the old endowed grammar school, and certainly this class of school has formed for centuries the backbone of secondary education in England. In recent times the endowments of many of these schools have proved insufficient for the requirements of the district, and consequently their fees have been too high for many scholars to attend them. In other cases, while these old endowed schools have been doing excellent work, they have had to suffer from the competition of schools established either by the School Board or some other local authority, whereas a better plan would have been to supplement the resources of the existing school rather than to set up an entirely new one. But it has also become evident that something more besides the old grammar school is needed, and we have seen the field now fairly well filled with other institutions of various kinds. But this very process of filling the field has brought to light the first and foremost need of secondary education in this country.

THE NEED FOR ORGANISATION.

That chief need can be summed up in the one word "organisation." It is a remarkable fact that, while our system of elementary education is fairly well organised, and is, in fact, a *system* and not merely a muddle, our forces for higher education are wasted and scattered in various directions without being brought together into one systematic whole. It seems fairly evident that we have now sufficient agencies and institutions for secondary work, or, if we have not sufficient, we certainly have the means of supplying them, but what is now wanted is to bring all these forces and agencies into one harmonious whole, and to reduce chaos into order. Until we do this we shall continue to lag behind foreign nations, like Germany, which provide an organised scheme of education from the lowest to the highest point. Moreover, the very existence of our now complete scheme of elementary education urges us on to bring our higher education also into line lest we leave a good foundation without any superstructure, or, what is worse, with a superstructure built up in a careless and haphazard manner.

THE BILL OF 1899.

The need of organisation, however, has during the last few years made itself so keenly felt that at length the powers of

legislation have been invoked, and during the year 1899 a beginning has been made in the Government Bill introduced by the Duke of Devonshire just before Easter of that year. This Bill only makes a beginning, but even so is most important as laying the foundation for a fuller scheme of secondary education to follow. In introducing this measure, the Duke said there was no intention of bringing secondary education under any centralised control such as was the case in elementary education, but that, on the other hand, the creation of local authorities ought to be preceded by the constitution of a central authority, which, without unduly controlling the local authorities, might yet give them information, advice, and guidance such as they could not obtain from the isolated and detached departments now existing. The powers and duties of these old departments, the Educational Department and the Science and Art Department, would be concentrated into one, while the powers of the Charity and Endowed Schools Commission would also be transferred partly to this new department in so far as they related to the inspection and examination of schools. The new department, in fact, is to be a Board after the model of the Board of Trade and the Board of Agriculture, but with the exception that, unlike the latter, it would have a Parliamentary Secretary as well as a President. As regards the constitution of the Board, at least two-thirds of its members would be representatives of the Universities or of other teaching bodies.

The first step has thus been made in providing for the proper organisation of secondary education, and it will probably prove later to have been a wise measure to thus constitute a Central Board, which can guide the numerous local authorities which will be created later. But it is these local authorities which will probably afford the greatest difficulty in making the next step.

THE LOCAL AUTHORITY.

The Report of 1895 remarked (Vol. I., p. 266) :—

> We have found the constitution of local authorities one of the most difficult, as it is one of the most important, portions of our task. Both in town and country, existing public bodies are to some extent in possession of the field; and we have to consider not merely what plans are best in principle, but which could be introduced with the least friction, and the least disturbance of existing arrangements.

There are two questions which at once press for a solution: What is to be the *area* of local management; and then, how is the authority for that area to be formed? It seems now to be admitted on nearly all sides, as regards area, that the county borough for urban area, and the county for the rural area, are the most

suitable units. Of course, there may be in some districts cases in which the exact limits of counties would be more wisely modified for educational purposes, especially, for example, in the county of Lancashire, where the southern portion with its numerous manufacturing towns and dense artisan population is sharply differentiated from the rural characteristics of the northern portion round Morecambe Bay. But these are merely matters of detail. A greater difficulty arises in the question of the members of the new authority. We have the County Councils or County Boroughs on the one hand, and the School Boards on the other, each claiming a voice in the management of secondary education. The Councils, as administering the grants for technical instruction, have already, in many cases, gained considerable influence over secondary education locally, while the School Boards have also made good their footing on the same ground. In his speech introducing the Government Bill (14th March, 1899) the Duke of Devonshire complained that School Boards have "encroached" upon ground not properly their own, and even the most ardent admirer of Higher Grade Board Schools can hardly maintain that they have any legal right to existence. Nor can it fairly be contended that secondary schools should be governed by an authority that was only and avowedly constituted for elementary work. Yet, on the other hand, no one can deny that the School Boards, in setting up higher grade schools, have been doing a good work in education, and have filled a space which existing agencies have somehow left empty. To this extent School Boards which have established higher grade schools may certainly claim proper recognition on any future local authority. They also have a claim to representation on the ground that, as secondary cannot be completely cut off from primary education, but that one forms a preparation for the other, it would be unfair to deprive School Boards of some voice in a grade of education higher than that which they themselves provide.

But when, as in some towns already (for example, in Liverpool), the School Board claims such a large amount of representation as one-third of the total number of members in the local authority, it is obvious that this is exceeding all due proportion, for School Boards, valuable as they are, were never meant to provide secondary instruction, and still less to supervise it, neither do they possess the requisite educational qualifications or the wide educational outlook necessary for this secondary work. It can, therefore, only be hoped that, while due recognition is given to the excellent work achieved already by School Boards, there will not be an undue proportion of School Board representatives upon the local authority.

THE MEMBERS OF THE LOCAL AUTHORITY.

But it is evident that one of the great needs of secondary education is that these local authorities should be constituted with proper care for the interests not of one local body or another, but for the higher education of the citizens as a whole. The difficulty arises when we have to face the question, What kind of representatives are best fitted to deal with the problems of secondary teaching? It is obvious that many of the excellent citizens who constitute the City and County Councils and the local School Boards have the best intentions, but it is doubtful whether their zeal in education is always "according to knowledge." For one thing, the English nation as a whole is not by any means so highly educated as the German or Swiss, and its citizens are, therefore, less able to deal with educational questions. Especially is this the case when these questions become of a more complex and difficult character than those involved in the working of elementary schools. We may derive some comfort from the fact that the business men of cities like Manchester and Liverpool have achieved considerable success in the development of local education on University lines; but that success—such as it is—is due mainly to two causes: first, because they have followed very closely the advice of avowed educational experts; and secondly, because in cities so large as those mentioned there are a sufficient number of local citizens who have been to a public school or a University, and have, therefore, received an education superior to that of the average commercial man. But such conditions are exceptional, and cannot be relied on universally in every town and district of the country. What is wanted, therefore, on any local authority for secondary education is the presence of several educational experts—either men or women directly engaged in teaching, or who have, perhaps, retired from the teaching profession itself, but have yet had sufficient experience to be aware of its needs and difficulties. Unfortunately, there has always in this country existed a certain distrust and even contempt of the schoolmaster. It may be because English people have not yet, like many foreigners, learned to value education and those engaged in it at their proper worth; or it may be because the schoolmaster has not proved himself (what he does not profess to be, but often is) that universally capable genius, "a man of business." As a matter of fact, most head masters, if they have any success at all, are essentially men of business, and owe much of their success to this fact; but it is true they rarely have had any opportunities of showing such qualities in public because no public department or authority has yet existed where their powers in this direction (when they exist) can have proper scope. It would, however, certainly be disastrous to the cause of secondary education if the voice of the

teachers was not allowed to be heard, and to be heard effectually it must come through a properly constituted medium. It is for this reason that we would urge the importance of proper and adequate representation of the teaching profession among the members of any local authority.

THE FUNCTIONS OF THE LOCAL AUTHORITY.

But having thus seen the necessity for the organisation of education by means both of central and local institutions, and having dealt with the functions of the central body, we may now ask, What are the functions of the local authority? The answer to this has already been foreshadowed by the last Royal Commission. The Report (Vol. I., 272) classes them under the following four heads:—

(1) The securing a due provision of secondary instruction.
(2) The remodelling (where necessary) and supervision of the working of local endowed schools and other educational endowments.
(3) A watchful survey of the field of secondary education, with the object of bringing proprietary and private schools into the general educational system.
(4) The administration of money destined for educational purposes, and derived either from the National Exchequer or from local rates.

A consideration of these duties will show us at once one or two urgent needs of secondary education. "The securing a due provision of secondary education" covers a wide field. In the first place it is not quite so easy as it seems to answer the question "What is secondary education?"

DEFINITION OF SECONDARY EDUCATION.

Everybody has a vague idea of its general scope, but it was curious to notice that the definitions given, for example, by witnesses before the last Royal Commission were all "of a rough and ready kind." The most common definition is the education that lies between the elementary school on the one hand and the University on the other. This is satisfactory enough as far as it goes, but, unfortunately, it is only a small percentage of secondary schools which send any of their pupils to the Universities, while there are certain schools nominally elementary which give an education which is in many respects secondary. Still, as a general working definition this may be accepted, especially if it is placed side by side with the definition given by the Commissioners themselves (Report, Vol. I., p. 135). "It is," they say,

"the education of a boy or girl not simply as a human being who needs to be instructed in the mere rudiments of knowledge, but it is a process of intellectual training and personal discipline conducted with special regard to the profession or trade to be followed." It admits more general culture than elementary teaching can give, and yet includes such a supply of special training as fits a child for its future walk in life. It must be, in fact, both general and special, broad and technical.

VARIETY OF CURRICULUM NEEDED.

Such being the case, there is obviously room for several types of secondary schools, for the field of education is wide, and the various walks in life chosen by scholars are many. It is impossible to fit every boy into the old classical curriculum, excellent as that curriculum is for its general mental training. It is certainly undesirable to give to the young a narrow technical training that only fits them for one trade or profession, and for no other; and, therefore, it is equally undesirable that our idea of education should be too firmly founded either on the old grammar school, whose highest achievement is a scholarship won at Oxford or Cambridge, or on the new technical school that merely teaches the skilful use of certain mechanical appliances. We have to fit our boys and girls not for a University or for a trade, but for a life, and we ought to educate them to be not merely students either of old languages or new sciences, but to be citizens of a great and complex modern State. What we need, therefore, more perhaps than anything else is that our local authorities should take a broad and comprehensive view of their duties in providing secondary education, and should refuse to narrow it down to any one-sided curriculum, either for the sake of non-local achievements or for local advantages.

IS THE PRESENT PROVISION ADEQUATE?

But if local authorities take this liberal view of their functions they will in many cases find that the existing provision for secondary education is inadequate. It was estimated by the Schools Inquiry Commission thirty years ago that just over twelve boys per 1,000 of the population required secondary education; and if we add in girls, who surely should not be excluded, it would not be too high an estimate to say that twenty-five children per 1,000 require it. Indeed, when we think of the strides made since 1870, not only in elementary education but in the general culture of the people, twenty-five per 1,000 must be considerably under the mark. With our present population, however, even this low estimate produces a total of 725,000 boys and girls now requiring secondary educa-

tion. Yet, when in 1897 the Education Department instituted an inquiry throughout England as to the numbers of children being educated in all the secondary schools of which they could discover the existence, whether public or private, they only received a total return of some 290,000 pupils, although they declared themselves gratified with the readiness of all those connected with such schools to furnish the information required. It is obvious that there must be a considerable leakage somewhere, even allowing for a large number of omissions and returns not made, and for pupils in schools too obscure to have come under the notice of this inquiry. By the time that the new central authority has got to work and been able to collect more detailed information it will, without doubt, be found that one of the chief needs of secondary education is more schools.

This need is, indeed, very clearly shown in a great city like Leeds, where, although there is an old grammar school of no mean repute, there is also a Central Board School taking scholars *after* passing Standard VII., and keeping them till the age of seventeen, which possesses over 2,000 pupils. It is evident that there are here not only plenty of children of a class requiring secondary education, but also plenty of parents desirous of their receiving it. The fees of the grammar school are, for such, too high, and the curriculum, possibly, not sufficiently elastic; yet it is only in comparatively recent years that the large mass of children not attending the grammar school have had this opportunity of getting a secondary education, such as it is, of the type which they evidently desire.

THE QUESTION OF FEES.

But it may be asked, Why could not the fees of the older schools be lowered or the curriculum altered so as to meet the wants of the district? This brings us to a difficult question. As regards the alteration of curriculum there is no real difficulty; it depends upon the views of the head master and governors mainly, though other considerations, such as the alteration of the teaching staff, will have their place. The question of fees, however, is of great importance. It has two sides, the financial and the social. Financially it has been found impossible to give a really good secondary education under £10 or £12 per head of pupils, and the estimates made from various schools by the last Royal Commission (Report, Vol. I., p. 187) are nearer the higher figure and in some cases above it. It is noticeable that several well-known day schools with small endowments charge fees averaging about £12, as at Manchester and Bradford, while schools like those of Bedford and Birmingham, which have large endowments, are able to charge

very low fees, such as £3 per annum. Bedford and Birmingham are exceptional in this matter of endowment, and it is quite clear that there are a large number of persons desiring a secondary education for their children who cannot afford the £10, £12, or £15 necessarily demanded by those schools which have no large endowments to support them. The financial difficulty to be faced, therefore, is the question: where is the money to come from necessary to give to a large number of children an education costing from £10 to £12 per head? It must be in some way provided by the community either by imperial or local taxation; and if we are to have an efficient system of secondary education people will have to put their hands in their pockets even more than they have done for elementary schools. A ray of hope is visible, however, from the civic generosity manifested by the citizens of some of our large towns, and when we see the thousands of pounds readily given to endow a new University like that of Victoria, in Liverpool, Leeds, and Manchester, or like the proposed Midland University at Birmingham, we need not despair of seeing equally large sums given to found good secondary schools when once the need for them is made apparent.

SOCIAL DIFFICULTIES.

At present the social difficulty is undoubtedly prominent. The class of parents who pay their £10 to £15 a year to send their children to the local grammar school, or high school, do not like, and often say they do not like, them to mix with scholars who come from the elementary schools and get their education for nothing owing to their having scholarships. Still less would they like the fees of the high school or grammar school lowered so as to admit a larger number of children of poor parents. This is perhaps more conspicuously the case with girls than with boys. But the education of the nation cannot be allowed to lag behind because of mere social distinctions, and if some parents find that the influences of home are not strong enough to counteract the influence of association with children of what they consider an inferior class, they will perhaps prefer to pay a higher fee for a more select school. If there are a sufficient number of parents to pay for such select schools there can be no harm in letting them do so, but probably it will be found in most towns that there is enough of the healthy democratic spirit to allow children of different classes to mix freely in a school common to the whole town without an undue exhibition of snobbery; and as time goes on, and education becomes more widely extended, this will undoubtedly be the case. It will perhaps be necessary to provide two or three grades of secondary schools in some districts, varying both in fees and in curriculum,

for after all secondary education is a wide term, and covers the education of different classes. Some need an education that will terminate at sixteen, others one that lasts till eighteen or nineteen years of age; these two classes, therefore, obviously require different classes of schools, or different arrangements in one school, and it will be the business of the local authority of the future to discover and provide for the varied requirements of each district.

OVERLAPPING.

Another most important duty, of which we are naturally reminded in speaking about different kinds of schools, is that of preventing what is known as overlapping. In some districts we find an old endowed school (perhaps insufficiently endowed) side by side with a new Technical School, itself not too lavishly provided for, Higher Grade Board Schools drawing money from the Science and Art Department and the rates, and a local University College also in want of funds to keep up a broad curriculum, of which possibly a large part is not needed by the majority of the students. The College takes boys and girls at sixteen or seventeen years of age, the High School keeps them till seventeen or eighteen or even nineteen, the Technical School takes scholars from both, and the Board School professes to train children as well as any of its rivals. Probably not one institution of the whole number is properly equipped for its work, and most are in need of further funds. It is obvious that it would be far better to join all these together in a harmonious system, and let one dovetail into another, as far as possible, rather than to let them continue to compete for scholars in an undignified manner. No doubt this harmonising and systematising might involve the suppression of one or other of the number, but it is better to have three or four really efficient educational institutions rather than half a dozen less satisfactory. At the present time in nearly every large town there are constant complaints of the encroachment of one educational institution upon another; it is certain that the University Colleges do much work that would be better done at a school, while the top forms of some schools do work that is quite up to the level of a University. Technical Colleges, again, often make expensive arrangements for doing work which could easily have been made to form a portion of the curriculum of some existing school, while sometimes schools attempt with insufficient appliances to do technical work which could be better done elsewhere. It must be confessed, however, that so far the danger has been that existing institutions have been overlooked, and that money has been lavishly spent to found and endow new schools, while older ones, doing excellent work but hampered by need of more funds to meet the growing requirements

of the times, are being starved. One of our greatest needs is for a sound local authority, supervised by a central authority free from local prejudice, which shall properly survey the local field or area and see that there is neither overlapping nor too scanty provision.

REGISTRATION OF EXISTING SCHOOLS.

Now, one of the easiest and most simple ways of thus surveying the local field is for the local authority to make a list of existing schools. It will thus be able to see whether there are too few or too many, and whether it will be better to increase the number or to amalgamate two competing institutions into one that is thoroughly efficient. The formation of this list or register will also be not only a guide to future action but an important act of registration, and will pave the way for more stringent measures in the future, under which every school, public or private, must be found on an official register. The importance of the registration of all existing schools cannot be too greatly insisted on, for it is a measure that concerns most vitally the welfare of the nation. The training of our young citizens is so important a duty that it ought not to be left, as it now is, to the casual chances of unregulated enterprise. It should be placed at least on the same basis as the formation of a trading company, and being a matter of public importance should be subject to public scrutiny. In the case of endowed schools the register practically exists in the books of the Charity Commission, but all other schools, including both the largest proprietary institution and the smallest private venture, are left without any official record. The compilation of a local and also of a general register of schools will have a most beneficial effect in giving a certain air of official sanction to their existence to begin with, and later in setting a standard to which all must conform in certain essential details. At first, of course, no doubt all schools, good and bad, will have to be placed on this register, but as time goes on it will be possible to insist upon a certain minimum of requirement before registering, and thus a definite standard will be fixed. The minimum requirements will include at least two points—the buildings and the teachers. It is hardly yet realised by the majority of parents that much of a child's mental and physical progress depends upon the suitability or otherwise of the building in which it is taught. An ill-lighted, stuffy classroom will inevitably produce lassitude of body and weariness of mind, and will deaden the proper effect of any teaching however vigorous, though under the circumstances it will be difficult also for the teacher to be vigorous and fresh. The sanitary position of the school should also be considered, the arrangement of the buildings, and whether they are really suitable for such special subjects as science and physical

exercises—all these points are essential for real efficiency. The inspection and approval of the buildings in which a school is held —whether public or private—will, therefore, be the first point to be dealt with before it is registered as a fit and proper place wherein to teach children.

PRIVATE SCHOOLS AND REGISTRATION.

No doubt some private schools will find it hard to meet all these requirements, but it is at least as important that our children should be placed in proper buildings for teaching as it is that they should be placed in proper buildings for amusement. A theatre must conform to certain municipal requirements, and it is hard to see why a school should not do the same. No doubt allowance must be made for existing buildings, and time should be given for alterations to be made, but, before long, scholars in secondary schools should at least be housed in buildings as carefully inspected and recognised as suitable as those in which we teach the scholars of elementary schools. The requirements of the Education Department as regards the buildings are enforced in the one case, and they should equally be enforced in the other.

As the new central authority previously referred to will have powers of inspection and examination, it will be necessary to see that every school on the register conforms to the minimum requirements which will be laid down as to teaching and general efficiency, and after due lapse of time those schools which are declared inefficient will have to be struck off the register. In fact, the same procedure will take place as is now applied to schools under the Education Department and the Science and Art Department. If a public list of schools is published in every locality, it is easy to see how great an influence the inclusion or exclusion of a school will exercise. Here again the question of private schools comes up, but there is no reason why they should not be included on the same list as public schools, provided they satisfy the necessary conditions. Indeed, for the better class of private schools the formation of such a list would be most advantageous, for they would practically gain the rank and status of public schools, and yet retain all the benefits of private management. On the other hand, the inferior private schools would be gradually extinguished, and though this might be a hardship in some individual cases, it could only result in the end to the general benefit of the community. But it may be asked, How could the central authority enforce its decisions, and make exclusion from the general register a serious matter for the excluded? We may look for an answer to the procedure of the learned professions. When a doctor or solicitor is struck off the register of the great medical or legal cor-

porations he cannot legally recover fees from a patient or client, and can only exist, if he continues the exercise of his profession, on sufferance. In time we may also hope that a school which has been struck off the scholastic register may be regarded in the same light, and will not be permitted to recover fees for tuition in a court of law. No doubt inefficient schools will here and there continue to exist, and of those efficient the efficiency will vary greatly; but an important reform will have been accomplished, and a great distinction conferred upon the scholastic profession when schools and teachers alike are placed upon a public register.

REGISTRATION OF TEACHERS.

For it concerns the teacher personally quite as much as the school, or education generally. At the present moment the teachers in secondary schools, public and private, are a dim, vague, unorganised body, with none of the claims to respect enjoyed by the members of the learned professions. In fact, schoolmastering is not a profession; it is merely an occupation, and, in many cases, a trade. This is not as it should be, but it is inevitable when we consider that it is a calling open to everybody, with or without qualification. No one can become a physician or a lawyer without passing certain recognised examinations, and being registered by a certain recognised body, such as the College of Surgeons or the Incorporated Law Society. But it is open to anybody who feels inclined to do so to begin teaching boys and girls. In times past it was avowedly the refuge of the destitute, and often of the incompetent, and if things have changed in recent years for the better it is owing more to the growth of public opinion and to multiplied facilities for education generally than to any other cause. It is sometimes imagined that most secondary teachers have, at least, the qualification of a degree at some University, but it is an appalling fact that nearly half of them have not; only 55 per cent in boys' schools and 11 per cent in girls' schools are graduates. The elementary teacher must have his certificate of competency before the Education Department allows him to teach; it is his degree, and often more valuable than the letters conferred by the mere passing of examinations. But the secondary teacher needs no such qualification, and, what is more, generally has not got one. The number of teachers with a degree in secondary boys' schools is only 55 per cent. Of course, all the better known schools—the better class of public endowed schools—have a staff consisting mostly of graduates of Oxford, Cambridge, or London. But these are not the only secondary schools in the country; indeed, they probably do not contain more than half the scholars. The remaining schools are evidently taught by persons

who may chance to be fitted for their work, but who can show no actual qualification for it. Imagine such a state of things in the legal, clerical, or medical professions; imagine the nation given over to untrained doctors, untrained lawyers, untrained clergy; and what a degraded and backward condition it would be in. But we cheerfully hand over our children to untrained schoolmasters, and then are surprised that our national education is no better than it is. The wonder is that the results are so good. One of the most pressing needs, therefore, is, evidently, a register of teachers, to which no person shall be admitted who cannot show some form of qualification. A University degree, especially if from the older Universities, is some evidence of culture and ability, but even that should be, as in Germany, supplemented by some diploma showing knowledge of the history and theory of teaching and study of child life and thought. No person should be allowed to teach children whose name is not on the register, and none should be on the register but those whose experience or University attainments show that they are fit to teach. In time, no doubt, some diploma of special pedagogic knowledge will be required from all, and the Universities are already taking steps to provide tuition for such a diploma, but for the immediate present what is wanted is the compilation of a register of persons authorised to teach. It must, at first, include many who can show no qualification but length of experience, but in time a proper standard can be fixed and kept to. Then, and not till then, will teaching become a real profession, and the schoolmaster take his proper place by the side of the lawyer or the cleric, not only to his greater personal dignity, but to the greater educational advantage of the nation.

EDUCATION OF GIRLS.

We have thus seen some of the most urgent needs of secondary education—organisation, a central and local authority, more schools and cheaper, better teachers, and proper registration. There remain several others, of which, however, we only have space to mention two, and, finally, the greatest need of all, and that is the need of making the nation feel that education is of vital importance. The two needs which require special mention seem to the writer (1) the education of girls, and (2) commercial education.

There has been a very great improvement in girls' schools during the last twenty or thirty years, and the Commissioners who reported in 1895 bear witness to this (Report, Vol. I., p. 15). They say:—

> The improvement which we have noticed is, perhaps, most marked in girls' schools, proprietary and private, as well as endowed. School-keeping is less

frequently than it used to be the mere resort of ladies possessing no other means of support. The development of women's colleges, the opening (as yet only partial) of Oxford and Cambridge to women, and the admission of women to classes at the new University Colleges has provided a far larger supply of competent women teachers. No change of recent years has been more conspicuous than this, nor any more beneficial, and in considering the causes which have produced this effect the opening of University degrees to women, in which the University of London was the pioneer, must not be ignored.

Yet, although there has been certainly great improvement, there is room for further improvement still. The vast mass of girls' schools are in the hands of private teachers, and of public schools most are proprietary, and carried on as a commercial undertaking by public companies. There are still very few *public* secondary schools for girls, and hardly any endowments for them. Considering the important influence of the feminine element in the nation, and the inevitable reaction which a low standard of female education must have upon the intellectual surroundings of both men and women, it is very necessary that proper public provision should be made for female education, and that it should not be left to the haphazard chances of private enterprise. The need of better education for girls is felt very acutely in small towns and rural districts where there are not enough girls to form a good secondary school, and where, therefore, there is no inducement for a public company to start one. But, recently, the suggestion has been made, and in Wales it is being carried out, that a girls' department should be added to the boys' department of endowed schools, and that boys and girls should, if necessary, be taught together in the same classes. This is, of course, frequently the case in Higher Grade Board Schools, and in these, as well as in the few dual secondary schools that have been already established, the system seems to work well. In the United States, and in Scotland, this co-education has long been the rule, and there seems no valid reason why, if it is successful in those countries, it should not ultimately be successful in our own.

CO-EDUCATION OF BOYS AND GIRLS.

In England, the principal mixed schools are public elementary schools, higher grade schools which have developed out of these, and some pupil teachers' schools. The others are mostly private schools, chiefly in Lancashire. Those who have experience of them seem almost always to have found the advantages considerable and the drawbacks comparatively unimportant, while the objections to them seem to be mainly theoretical, and not felt by those who have had practical acquaintance with such schools. (Report, Vol. I., p. 160.) There is an undoubted benefit in allowing girls to have the same advantage of masculine teaching as their

brothers, whereas it is not always to the advantage of girls that they should be brought under exclusively feminine influence during their school lives. The financial gain in having one good school of boys and girls under one head master, with a female assistant, instead of two poor and struggling separate schools, one for boys and one for girls, is obvious in such small towns and rural districts as have been already alluded to. It is probable that many small country grammar schools, now struggling on with an insufficient number of boys, would find their financial position improved by including the girls of the district among their scholars, while the girls would certainly receive a better education than is now open to them. In larger towns there is, of course, room for separate girls' schools, and more of these ought to exist upon a public basis; but, whether in town or country, it ought to be admitted that it is not by any means absolutely necessary that girls should be taught exclusively by women, but that they should share as many as possible of the educational advantages open to their brothers. A system of national education which neglects to provide adequately for the education of girls as well as boys will never be truly national, and will never produce the best results of which the youth of the nation is capable.

COMMERCIAL EDUCATION.

We turn now, however, to another very important branch of education which has been strangely neglected in this country, and that is commercial education. For some reason or other men of business have never believed it necessary that they should receive any special training for what is undoubtedly a difficult and often complicated vocation, though, of course, they admit that a professional man requires such training. Now, at last, the great increase of foreign competition, felt by almost everyone engaged in any branch of manufacture or commerce, has aroused a widespread and, it may be added, a wholesome feeling of alarm in the community. It is becoming more and more clear that among the principal causes which are threatening England with a grave diminution of her national commerce and her international trade must be placed the better education enjoyed by her competitors. This does not necessarily mean merely better commercial education, but better general education, which invariably has its effect sooner or later upon the mental development of a people. Year after year the reports of British Consuls speak of the injury done to British trade by the want of linguistic training, of local knowledge, of insight and adaptability shown by our merchants and manufacturers or their representatives. Now, insight and adaptability are not the results of mere technical training, but of a broad

general education; they are evidences of mental development and not of special knowledge. What our men of business in England want is the same sound general education as is possessed by their foreign rivals, the Germans, Dutch, Belgians, or Swiss. It is not merely that business men of these nations are better skilled in foreign languages, in foreign currency, in commercial geography, and similar subjects, though, of course, they have a better knowledge of these than Englishmen have; but many foreigners possess a far higher standard of general culture, and this cannot fail to have its due influence. If education is of any value at all, and most people admit that it is, it must be as valuable to the man of business as to anyone else. This has been well put in the Memorandum on Commercial Education issued by the Sub-Committee of the London County Council in April, 1899:—

> There is the need, perhaps supremely important under present economic conditions, of developing in all grades of commercial men the invaluable quality which we may describe as inventiveness, resourcefulness, readiness to note a change of conditions, and fertility in conceiving new expedients to meet the new circumstances. One of the common causes of commercial stagnation and decay appears to be the dulness of imagination which stands in the way of a timely appreciation of changing conditions, and the inertness of mind which prevents the adoption of the new expedients called for by the change. This lack of imagination and inertness of mind, a characteristic result of absorption in routine, is often partly caused or increased by a want of general cultivation, an ignorance of possible alternatives, and too close an adhesion to one limited field of observation and work. To supply this want is especially the object of commercial education of the University grade.

COMMERCIAL EDUCATION OF DIFFERENT KINDS.

We see from this that general education must have its place in the training of the man of business as well as the professional man, and there is no reason why the "captains of industry" should not be as highly trained as the leaders in any other vocation. We will return to this point in a moment. But, whatever may be said about general education for commercial life, there can be no doubt that some special or technical education is also needed. "Business" is a wide term, and embraces many callings, but there are certain main features which are common to all. With all the varieties and complexities of commercial callings, there are three main classes into which those engaged in commerce may be divided: (1) There is the great army of the rank and file, as they may be called—junior clerks, shorthand writers, copyists, typists, accountants, bookkeepers, and so on. These are engaged in employments which are certainly largely mechanical, but which require certain valuable qualities, such as honesty and patience, and certain mechanical training on well defined lines. The special education which the members of this large class require is not

advanced in character, and could easily be given in the higher forms of secondary schools, or in evening continuation classes; (2) there is then a second class of employés holding more responsible positions, such as senior clerks, foreign correspondents, agents, travellers, and managers of departments. This class varies, of course, in every branch of trade—in banking, insurance, shipping, railways, merchants' houses, and so forth—but they form a class on whose shoulders rests a great and important portion of the commerce of the country, and on this class the nation has to rely for maintaining its trade against foreign competition. These certainly require as high an education as their foreign rivals, *i.e.*, a good general secondary education first, and a further training in commercial subjects. Then (3) comes the smaller but most important division of all—the leaders of trade and industry, the merchants, manufacturers, heads of houses, and millowners. These require an education quite as high, *of its kind*, as that of the great lawyer or the successful doctor.

NO EXISTING PROVISION FOR COMMERCIAL EDUCATION.

But what provision do we, as a nation, make for any of these three classes? As a nation, absolutely none; none, that is, as proceeding from the State, and as assisted by Government. The code for evening classes in elementary schools certainly allows bookkeeping and shorthand and similar subjects to be taught, and a certain amount of these subjects is being taught, but the number of scholars is not large, the total being (1898) only some 350,000, and many of these are learning science and English subjects. There has been no organised attempt made to give definite and systematic instruction for commercial life. All that has been done so far by the State is to teach one class of subjects, to encourage those by every means in its power, and to neglect all others. Thus, for many years past, the Science and Art Department of South Kensington has been doing very excellent work in organising and encouraging the teaching of science and art, with a view to promoting technical education and to stopping the competition of foreign countries, in which, as is well known, scientific and technical education is fostered in every possible way. But England has, apparently, made up its mind that science and art are sufficient to meet all competition, and give all the necessary training to enable us to combat successfully our rivals. It is not perceived that the teaching of these subjects is only half the battle; they only apply to half our modern commercial life, and there is another, and quite as important a half, which is, so far, entirely neglected. The work of the Science and Art Department only touches the career of the artisan and manufacturer, the dyer,

the designer, the chemist, and engineer. It does nothing for the merchant or the merchants' clerk. Yet the latter are quite as important as the former, and their functions in the commerce of the country are quite as necessary. It seems to be forgotten that commerce has two sides, the productive and the distributive, and, in order that the trade of a country should flourish, the business of distribution should be attended to quite as carefully as that of production. It is of little use to manufacture goods if we cannot compete successfully with other nations in distributing. We lose half our trade if the distribution of our manufactured products falls into the hands of foreigners. What is needed, therefore, is an education which shall do for one branch of our trade, the distributive, what is already done for the other, and shall help the merchant and the clerk as we already help the manufacturer and the artisan. An education which provides only for one half of the industrial community and not for the other is one-sided.

HOW COMMERCIAL EDUCATION IS DISCOURAGED.

Yet, so far, we not only do nothing for commercial as distinguished from technical education, but we positively discourage it, and in this way: It is notorious (it has already been alluded to) that many secondary schools suffer from lack of funds. They have, therefore, to supplement their deficient revenue by working at subjects upon which they can receive money grants for their pupils' successes. But what are the subjects which bring in the money? Only science and art subjects, and no others. If schools teach chemistry and drawing, they can get very large sums of money in this way from the State; but if they teach subjects which are commercially useful, such as the French, German, and Spanish languages, or bookkeeping, foreign currencies, shorthand, or commercial geography, they get nothing at all. Obviously, therefore, it is not the interest of the schools to encourage commercial education; they get no money from it. Yet it is the interest of the mercantile community that foreign languages and commercial geography should be well known to its members, and there is no valid reason why these subjects should not receive State grants just as much as freehand drawing and chemistry. Here, then, we have a very practical point at issue. Let commercial training rank as of the same importance as scientific or manual training, and let it be encouraged by money from the State, and we shall then be able to raise up a generation of mercantile men as well trained as those who carry on the callings for which we give them so-called technical education. In the modern world commerce is every whit as technical as manufacturing occupations, and requires

nowadays a very skilled and carefully trained mind. Let our secondary schools be encouraged, as they are in Germany, to teach those subjects which are useful to a man of business, and we shall see in a generation or so a very marked improvement in our foreign commerce.

HAS EDUCATION ANY VALUE?

And not only commercial subjects, but the whole of our national secondary education needs development and encouragement. England lags far behind such countries as Germany, Holland, and Switzerland, and the reason is because her citizens do not yet believe in the value of education. They believe in it more than they once did, certainly—the organisation and growth of our elementary schools since 1870 is a proof of that—but the belief is as yet only half-hearted and partial. Yet if, as is now acknowledged, it is good to give a certain modicum of education, even to the lowest and poorest, surely it is equally good to educate properly the children of the middle classes. But this is hardly acknowledged by the ordinary man. If his son is going into business, as, of course, the vast majority of all young men do, the father, as likely as not, takes him away from school as early as he decently can, at fourteen or fifteen years of age, and says he does not believe that what he learns at school will be any use to him for a commercial life, but he must learn it in the office. Now, the mere routine of an office, or of any business, can be easily learnt in a year or two, and there is no necessity to take a lad away from school early to learn it. It is not *what* a boy learns at school that is useful to him directly in after life, but *how* he learns, and how his mind is trained while learning. The Latin language may not be directly useful in the counting-house, but the processes which the youthful mind has gone through while learning it, and the mental training it has afforded—the mental gymnastic, so to speak—are of the utmost value. And that is why the Germans are now beating us in commerce to-day; not because they know more foreign languages than we do, but because they bring to commerce the same trained minds as they bring to the law, to medicine, or to statesmanship. We talk about the "professions" and "business" as if they were something utterly and entirely different, whereas they differ only in outward things, but require for success almost exactly the same internal qualities. Business or commerce, nowadays, is a profession, and before very long only those who have the same training in their own line as professional men have in theirs will become successful in it. But until Englishmen believe more in the value of education in and for itself it is impossible for many of them to succeed in the modern world so well in

the future as they have done in the past. Times are changing, and we must change with them. Education is fast becoming, more than ever it has been before, a weapon both of offence and defence, and it is the individual or the nation which has the best weapon that must in the future win in the battle of life. When we as a nation have realised this we shall bestir ourselves in a less leisurely fashion than at present to improve our system of secondary education; we shall place schoolmastering on the same level as other professions by insisting that a schoolmaster shall be as properly trained for his work as a barrister or a doctor; we shall sacrifice something to keep our children at school for a longer period than at present in order to develop their mental faculties and make them ready and alert in the struggle of modern conditions; we shall take care that the leaders of industry have the same high training as the leaders of other professions; we shall organise our education instead of allowing it to struggle in poverty and chaos; in other words, we shall believe in education, and act on our belief.

Company Frauds and Parliamentary Inactivity.

BY J. G. SWIFT MACNEILL, Q.C., M.P.

THE Parliamentary Session of 1899 has closed without the enactment of any legislative remedy for the better protection of the public against the thieves disguised as the promoters of fraudulent companies. The effect of recent revelations in which a company promoter openly boasted that the front page of his prospectus had cost fifty or sixty thousands of pounds sterling, taken from the shareholders, and spent in secret commissions to deceive them, has been admirably summarised by Mr. Stutfield in an article entitled "The Company Scandal: A City View," which appeared in *The National Review* for December, 1898. Mr. Stutfield writes:—

> An immense pother has been made about the Hooley business, yet it tells us very little that we did not know before. That the corrupting influence of the company-monger is not confined to trade circles has long been patent to every thinking person. Every City man knew long ago that there were peers who sold their names to promoters for the adornment of that front sheet which, as Mr. Hooley reminds us, is the most vital part of a prospectus. He is, therefore, not particularly impressed when he reads that on the boards of the Hooley companies, through which the public is said to have lost £11,000,000, there were one duke, six earls, half a dozen lords, beside baronets, knights, admirals, generals, &c., galore, whose directorial functions were mainly decorative. He knows, too, that the recent scandals are quite trifling compared, for instance, with the iniquities of the Trustee and Executor group of trust companies which were so carefully hushed up five or six years ago owing to the number of eminent persons involved; and he cannot but smile at the spectacle of a public which so complacently swallowed the Winchester House camel straining thus vigorously at the Hooley gnat. The real value of the "shocking revelations," which have been such a godsend to the evening newspapers, lies in the wide publicity they have obtained. They have brought home to the mind of the average citizen the depth and breadth of modern financial corruption, and if Mr. Hooley, by his evidence, succeeds in shaming the public into taking effective action in the matter he will, whatever his own sins may have been, have done a great deal of good.

The general public have, however, only a hazy view of the height, length, depth, and breadth of the frauds practised in the abuse of the law relating to the formation of companies with

limited liabilities. Her Majesty's judges, observing the important principle on which Lord Brougham laid great but not excessive stress of keeping the legislative and judicial functions quite separate, rarely, even when they happen to have seats in the House of Lords, intervene in the discussion of matters of acute public controversy. The Lord Chief Justice of England, who, both at the Bar and on the Bench, has had ample opportunity of observing the operations of fraudulent company promoters, must have been moved by an overwhelming sense of public duty when, departing from the ordinary and praiseworthy practice of abstinence from comments on public matters observed by members of the justiciary, he, on the 9th November, 1898, on the reception at the Law Courts of the Lord Mayor of London, speaking from the Bench with all the authority of his high office and great and honourable career, drew public attention to the company fraud as

> A class of fraud which is rampant in this community—fraud of a most dangerous kind, widespread in its operation—touching all classes, involving great pecuniary loss to the community—a loss largely borne by those the least able to bear it—and even more important, much more important, this fraud which is working insidiously to undermine and corrupt that high sense of public morality which it ought to be the common object of all interested in the good of the community to maintain—fraud blunting the sharp edge of honour and besmirching honourable names.

I make no apology for quoting at considerable length passages from this speech of the Lord Chief Justice, having regard to the circumstance that it embodies an admirable exposition of the abominable system of company fraud now rampant. The speech, moreover, although widely noticed in the press at the time and fully reported in the daily papers, has not, so far as I am aware, appeared in any permanent form. It must, notwithstanding, be regarded as a powerful and irrefragable indictment of the system under which immunity is accorded to the perpetrators of base and cowardly swindles. The moral of the speech of the Lord Chief Justice was the necessity for immediate legislation. He said :—

> It is time that public opinion was aroused on this question. You, my Lord Mayor, can yourself do much in this direction, and those who are associated with you in the great Corporation of which you are the head can do much by example, by condemnation, by ostracisation of any persons who have acted a part in any such nefarious enterprises, if enterprises they can properly be called. Above all, you can give to the Legislature the benefit of your ripe experience in commerce in advising how this state of things is to be remedied, if it can be remedied.

It is, I think, highly significant that these words were uttered the day before the first autumn meeting of the Cabinet for the commencement of the consideration of the Bills to be proposed by them in the session of 1899. Every Cabinet Minister attended that meeting of his colleagues literally with a copy of Lord Russell's

speech in his hands. That the session of 1899 should have closed without any legislation for the checking of company fraud is in itself a justification of the title of this article.

Lord Russell thus referred to the great pecuniary losses which had followed from the "nefarious practices" associated with the promotion of bogus companies:—

> The Official Receiver charged with the winding-up of public companies, who has rendered, and is rendering, the most valuable public service, has, at my request, furnished to me some figures on this head. They are startling. He gives me the figures for a period of seven years, from 1891 and up to and including 1897, and upon the official information at his command, and taking the advice of those in a position to check the estimate—for in part it must necessarily be an estimate—he comes to the conclusion that in that period of seven years there has been lost to the community and gone into unworthy pockets no less than £28,159,482, made up of losses of creditors dealing with companies £7,696,848, and of loss to the wretched contributories or shareholders £20,462,634. And, my Lord Mayor, when you recollect that these are the figures relating only to companies wound up compulsorily, and that they exclude cases of reduced capital, the losses in relation to companies whose shares were taken by the public at par, but whose present value only represents a very few shillings or pence in the pound of their par value, you will see that the loss to the public is enormous. But, in addition, there is what I think a weightier consideration the effect of such transactions, if allowed to go on, almost with impunity, upon the public mind and confidence. These are pressing considerations, which show that these matters should be dealt with as of urgent importance at the present moment.

The description by the Chief Justice of the "curious aspects and disguises" which this fraud, like the mythological character Proteus, has assumed may be regarded as a *locus classicus*, and many of the statements of his lordship could be abundantly illustrated by the revelations of two subsequent cases—one tried in London last April with reference to offences committed in connection with the Western Australian Gold Syndicate Limited and the West Australian Gold District Trading Corporation Limited, and the other tried in Dublin in July last—Davoren *v.* Wootton and Others—which concerned the promotion of the Components Tube Company.

> One common cause of loss, and one common mode of perpetrating the fraud, even if a concern is solid and worthy, is over-capitalisation. A concern which is honestly worth £100,000, and which upon that capital value might well pay a decent return for investment, becomes an imposition if inflated to satisfy the greed of the middleman—the promoter—to cover extravagant advertising charges, extravagant fees for expert reports, gifts in money or in shares to procure directors, aye, and even to procure the introduction of directors. By these means it is offered to the public at an inflated price for two or three times its actual value; and need I say that in such a case loss and failure are certain, and the public are called upon to pay fees for the deception which has been practised upon them? Even if it could be said that the boards of directors brought actual knowledge of business or strength of government to the concern, it might at least mitigate the evil, but it is notorious that in too many cases

they bring neither one nor the other; neither knowledge nor strength; that they are chosen because it is supposed that their names or their titles might be attractive to the public. That is one great cause of the frauds which are carried out. Another is that utterly worthless concerns are foisted upon the public. The same machinery is used, but it is a machinery which resorts to the grosser forms of misrepresentation and fraud. A few illustrations which have come before the Court occur to me. There was one case in which a property was sold, or, at least, was purported by the vendor to be sold—a property on the West Coast of Africa—for the sum of £48,000, when there was no property in existence at all. But an agent was sent out after this fictitious sale had been effected, whose report recorded the purchase of a property for the sum of £140 from a native chief which the agent thought would nearly answer the description given of the fictitious property described in the prospectus. In another case a business having been bought a few weeks before the formation of a company for a sum of £637 was sold to the public, who subscribed for it something like £76,650. These are the grosser cases. Another mode of fraud which is practised—I am speaking from my experience in courts of justice is this: going to allotment on insufficient capital. The public did not subscribe as was hoped, and there was but a small amount of money from them. What, then, is to be done? An honest, independent, disinterested board of directors who knew their business would say that it was impossible to go to allotment upon such a subscription, but they are not their own masters. They are, in the cases which I have been supposing, the creatures of the promoters who pay them, and they are not in a position to form an independent judgment. What is the result? The promoter gets hold of what money there is, and to carry on the company's miserable, weak existence the directors issue debentures, largely unregistered, and of which the creditors have no notice. They get an apparent amount of business carried on by the company, tradesmen and merchants deal with them, and, when the crash comes, down come the debenture holders and sweep away every stick that belongs to the company, and the creditors are left without remedy. Another and a last illustration I will give. It is the case of what is known as the one man company, that is to say, where a man changes his business into a company and takes payment in debentures of that company. Again the public, tradesmen, and merchants deal with them, and when the crash comes the debenture-holder—the vendor, or the vendor's assignee—comes down, and again the creditor is left without redress. I have only one word more to say in this connection, but it is an important word. It is this, that when the constitution of companies under the Act is considered these things would be impossible—certainly impossible to anything like the same extent—if the boards of directors were honest, intelligent, independent men, with no interest to serve except the interest of the shareholders. The first duty of a board of directors is to determine whether they will approve of the contract on which it is intended to base the proceedings and action of the company. The next important question they have to decide is whether they will, or will not, go to allotment. If they are paid by the promoter, and have interests differing from those of the shareholders, how could it be said—indeed, how can it be expected—that they shall discharge honestly the trust that they owe to the public?

The Lord Chief Justice proposed as methods of remedying this great iniquity, "which should be dealt with as of urgent importance at the present moment," first, that the public should have all the information they require about a company before investing in it, and that every person holding a position of trust should be compelled to disclose any private interest which he holds.

The first object ought to be to ensure as far as practicable that the public should be afforded all such information as might affect the reasonable judgment of a man in determining whether he would or would not invest in a particular concern, and the next object ought to be that all holding fiduciary or quasi-fiduciary positions should be bound to disclose fully and clearly any interest which they possess differing from the interests of the other shareholders; in other words, that the transactions should be open and above board, and all the parties dealing on equal terms. Although many such cases as I have suggested have taken place it is to be regretted that in but few instances has punishment followed upon the perpetration of crimes such as these, for crimes they certainly are; for while the law is strict to punish, and apt as is the machinery to punish persons who commit offences against the law of property, for reasons upon which I need not dwell it is often difficult to procure evidence to support a prosecution.

The failure of the Government to place on the Statute Book any measure with the object of protecting the public against company-promoting sharks becomes more significant when recollection is drawn to the fact that so far back as January, 17, 1898, Sir Michael Hicks-Beach, the Chancellor of the Exchequer, a former leader of the House of Commons, and a prominent member of the Cabinet, in a speech at Swansea, described the frauds of bogus company promoters in language almost as graphic as that of the Lord Chief Justice, and told with an exquisite directness of expression and a candour rarely paralleled the stumbling-blocks in the way of remedial legislation. I quote from the *Times*:—

When he was President of the Board of Trade he did his little best to secure that where there was roguery of this kind it should at least be brought to the light of day, so that by public examination in the courts the people should know what had been done to their detriment. He was seconded in his efforts by one of the ablest and most courageous of Her Majesty's judges, now a Lord Justice of Appeal, but their joint efforts had been almost rendered nugatory since by, he had no doubt, a perfectly correct interpretation of the law by the highest court of law, namely, the House of Lords. He was anxious that business men in this country should take up this matter and press the Houses of Parliament to set the law right. What happened now? A man who was practically a bankrupt formed himself or some of his children into a limited liability company, issued debentures to a confiding public, with its money discharged his personal obligations, taking care to have a nice little plum in reserve in order to start somewhere else in a different line of business, and then left a public lamenting with assets that were wholly or nearly worthless. Or a man started a company in the same way, but took up the debentures himself, got confiding tradesmen to trust him, and then proceeded to liquidation, putting in his debentures as a prior claim on all the assets, and leaving the confiding tradesmen lamenting, the courts, perhaps, holding that they had so little interest in the liquidation of such a company that they gave them no say in the matter whether the liquidation should be compulsory or by the voluntary process. The present state of the law in this matter deliberately encouraged fraud upon the public. They would say he was a member of the Government, and the Government ought to set the matter right. Well, almost the first measure the Government introduced was a Bill to deal with this matter. It had been considered for two years by a Select Committee of the House of Lords. He was afraid there were a few members even in that

gilded chamber who were not unfriendly to what was known as "guinea pigs." He did not deny that individuals of the same kind might be found in the House of Commons.

These words were uttered, it should be borne in mind, several months before the Hooley revelations. The guarded reference of the Chancellor of the Exchequer to the "guinea pigs" of the gilded chamber was far from unjustifiable. There are no fewer than 586 members of the House of Lords, including the spiritual Lords. They share among them no fewer than 435 directorships or chairmanships of commercial concerns. On the list of peer directors of companies there are two bishops, nine dukes, eight marquises, fifty-three earls, nine viscounts, and eighty-one barons—all members of the House of Lords. The Select Committee of the House of Lords on Company Promoting, to which Sir Michael Hicks-Beach alluded in no very complimentary terms, consisted of eleven peers, of whom seven were company directors who held no fewer than fifteen directorships amongst them. The Chancellor of the Exchequer was right in not denying that "guinea pigs" could be found in the House of Commons. He had himself sat in that House with Jabez Balfour. In the article entitled "The Company Scandal," to which I have alluded, Mr. Stutfield writes:—

I trust our Cabinet Ministers and party leaders will lay the words of the Chief Justice to heart and abstain from sending any more disreputable company-mongers down to contest constituencies. In politics I am a strong Unionist, but the preference shown by our party managers for candidates of this description really puts a severe strain upon the loyalty of its supporters. Let us hope, too, that the Government will undertake the reform of company laws, criminal as well as civil, in a thorough and comprehensive fashion.

Mr. Rentoul, Q.C., the Unionist member for East Down, in an interview which was published in the *Irish Times* of February 14th, 1899, said:—

I am thoroughly in sympathy with Lord Russell in the necessity of drastic amendment in company laws. We are far behind France in this respect. And, to begin with, I would forbid members of Parliament to have anything to do with the promotion or direction of public companies. It is not good for the House of Commons that it should be "worm-eaten" as it is with company promoters and directors.

"Worm-eaten with company promotors and directors!" What a disparaging description of the House of Commons. But is that description, however disparaging, accurate? The writer of a very able article in the *Investors' Review* for August, 1895, entitled "The Directorial Contingent in the New Parliament," endeavoured to set out "the present directorships" of members of the House of Commons as far as they could be traced "through recent prospectuses and Skinner's 'Directory of Directors.'" This writer says:

The House of Commons embraces 670 members, and we find that 264 of them, or 39·4 per cent, are members of boards of directors. This is a smaller proportion than might have been expected, but still a sufficiently large one to

be of great importance in determining the character and moral standpoint of Parliament as a whole. And its significance is enhanced by analysis. These 264 individuals, for example, help to direct no less than 667 public companies, and that although 111 of them are members of one board only. It follows that "guinea pigging" must prevail to a considerable extent amongst the remaining 153 men who divide the other 556 companies amongst them. And it does, although it is difficult, perhaps, to say just where fair and honest company directing ends and the profession of the "guinea pig" begins. To say that a man cannot help to manage more than three companies might be a fair measure of directorial capacity when each of the three companies pursued a different line of business, and was important in its line. But when one company supplements another or forms one of a group of companies in the same trade, or when, as often happens in connection with our larger railway companies, there are a number of small companies dependent on a larger one, it is conceivable enough that one man might legitimately occupy a place on half a dozen different boards and still not be worthy of the designation "guinea pig." In fact, the true "guinea pig" is a miscellaneous fellow who gads around the City and hops from this board meeting to that to pick up a living without regard to what the business may be he pretends to assist in guiding. . . . Proceeding with our analysis we find that 61 members of Parliament have seats on two boards, 40 on three, 15 on four, 17 on five, 8 on six, 4 on seven, and 3 on eight. Then follow five individuals whose directorial labours embrace no less than 69 companies. One sits on nine boards, one on fourteen, one on sixteen, and one on twenty. This is magnificent.

In his speech at Swansea on the eve of the opening of the Parliamentary session of 1898, Sir Michael Hicks-Beach invited the public to bring pressure upon the Government, of which he is a member, to secure the amendment of the company law. It might, perhaps, have been expected that some serious step would be taken in that direction. Sir Michael Hicks-Beach himself stated that the first measure the Government had introduced on their advent to office was a Bill to deal with company reform "which had been considered for two years by a Select Committee of the House of Lords." The session of 1898, notwithstanding the pronouncement of the Chancellor of the Exchequer, closed, as the last session has closed, without any amendment of a system under which gigantic frauds are perpetrated literally every moment. During the closing weeks of the session of 1898 the attention of the public in this country was startled and held enthralled by the story of Mr. Hooley's transactions as a company promoter and his methods of securing "front sheeters" for his prospectuses. The Government saw the storm of public indignation which was gathering and likely to burst upon the heads of men who were bent on shielding the company promoter at the expense of his victims. Under these circumstances the Lord Chancellor himself, on the 11th day of August, 1898, towards the close of the session, and when the excitement created by the Hooley scandal was at the highest, in a speech from the woolsack made an apology for delay, and attempted to beguile the public mind by the comfortable,

but wholly unwarrantable, assurance that rotten companies are few in number and easy to detect. As I have put a construction on the Lord Chancellor's speech which reflects grave discredit on that personage, it is but right that I should quote his words, which I will ask the reader to contrast with the utterances of the Lord Chief Justice on Lord Mayor's Day, 1898, while he, at the same time, bears in mind the fact that Lord Halsbury, who takes so roseate a view of a system under which the honest earnings of the poor are filched by City swindlers, is himself the author of the judgment which stamped with the highest judicial approval that fruitful source of swindling, the "One Man Company," a judgment which made Sir Michael Hicks-Beach "anxious that business men should take up the matter and press the Houses of Parliament to set the law right."

The reference to this deliverance of Lord Halsbury in the index to the "Parliamentary Debates" (authorised edition) is as follows: "Halsbury, Earl of, Lord Chancellor, Companies Bill, Report of Committee, Explanation." Lord Halsbury's explanation was given from the woolsack, as I have said, on the 11th August, 1898. I select from the speech, which is marked with an asterisk, thus indicating that the proofs have been revised and corrected by the author, the following passages. Here is the Lord Chancellor's explanation of the delay in legislation for checking company fraud on which Sir Michael Hicks-Beach had so severely commented in the previous January. The Lord Chancellor said:—

> My Lords,—In relation to the report of the Committee on the Companies Bill, which has now been sitting, as your lordships are aware, for two sessions, I desire to explain that the evidence upon the subject, which is very voluminous and important, has been printed by order of the House, but there has been no time for the Committee to consider their report. Of course, the subject of the whole formation of joint-stock companies has been for a considerable period before the public eye, and I am not surprised that a great many people are desirous that the report of the Committee should be issued with the sanction of all the members of the Committee, but the evidence did not close till late in the session, and there has been no time since that period for members of the Committee to meet and consider what report they should make on the Bill which was originally submitted to them for consideration. I think it is well that people should understand the difficulties in the way of that Committee going through the matter more quickly than they have been able to do. . . . Certainly it is our hope if, as we desire, we should be reappointed, that we shall be able in some way to suggest some amendments to the law which I, for one, quite admit are required in the present state of things, where almost all the great commercial interests of the country are tending towards the establishment of joint-stock companies. It is not unnatural that a great number of persons are interested in this question, and would desire the assistance of your lordships in legislation on the subject.

The Lord Chancellor then, in the following words, endeavoured to minimise the extent of fraud by company, and to lull the public

into the false sense of security, notwithstanding the Hooley exposures—a fool's paradise, from which they were aroused by the stirring warnings of the Lord Chief Justice in the subsequent November, and his startling statements of the tens of millions of pounds sterling which have made their way into "unworthy pockets." Lord Halsbury said:—

> The problem is not an easy one to solve, but speaking for myself—as we have not had time to consider the evidence I cannot speak for the whole Committee—I should certainly say that nothing more disastrous could happen to the commerce of the country than any attempt to place shackles on the development of joint-stock companies carrying on industrial enterprises. A part of the evidence which will no doubt make a great impression points to the ridiculously small proportion which what are called fraudulent companies bear to the enormous mass of *bonâ-fide* commercial enterprises, *bonâ-fide* and profitable in all respects; but, as I have said, it has been impossible to proceed more quickly in this matter by reason of the draft which the Committee makes upon the judicial strength of the House. Three members of the judicial body have been taken away, and we have not been able, with due regard to the judicial business of the country, to give more than a day a week to the Committee.

Fraud by company, which has been declared by the Lord Chief Justice to be "rampant in the community," "widespread in its operation," "touching all classes," is pronounced by the Lord Chancellor, speaking as a Minister of the Crown, to be "ridiculously small." "Ridiculously small" is Lord Halsbury's idea of a system of fraud by which in companies that are wound up compulsorily alone, excluding cases of reduced capital, within a period of seven years from 1891 till 1897 £28,160,482 has gone into "unworthy pockets." It is, I think, a matter of the utmost significance that the Hooley proceedings were actually in progress, and the reports of the revelations incidental to those proceedings filling the columns of the daily press, at the very time the Lord Chancellor was talking of fraud by company as "ridiculously small."

Lord Russell's scathing indictment of this system of licensed iniquity was a powerful antidote to Lord Halsbury's soothing syrup, and the delivery of that great speech by the Chief Justice on the eve of the first meeting of the Cabinet for the consideration of Government measures made it difficult for the Administration to avoid dealing with company reform in the session of 1899. The Cabinet, however, have adroitly managed to protect their *protégés*, the "guinea pigs," for at least another year. Not deterred by the failures of previous attempts at company legislation which had, since 1896, been initiated in the House of Lords, they resolved once more to introduce a Companies Bill not in the House of Commons but in the House of Lords, knowing well that by this action the fate of the Bill as a legislative measure was sealed. The Bill thus introduced to the House of Lords by Lord Dudley

on behalf of the Government was read a second time on the 10th February, 1899, and referred to a Select Committee. The report from this Select Committee and the proceedings of the Committee were ordered to be printed on the 18th May, and the report was presented in June. The Bill, as amended by the Select Committee, was also ordered to be printed. I have before me the original Companies Bill of 1899 in the form in which it was introduced by the Government, and likewise the Bill as amended by the Select Committee, after a session of upwards of three months. They met for the first time on the 13th February, and their last sitting, when the Bill was ordered to be reported with amendments to the House of Lords, took place on the 18th May. The contrast between these two documents is of interest. It is, I think, the general experience that a Bill leaves a Select Committee room in a form more extended than when it was first submitted to consideration. The various amendments in the nature of explanations, provisoes, and new clauses naturally have a tendency to enlarge a Bill. The Companies Bill of 1899, in its treatment by the Select Committee of the House of Lords, has had a somewhat unique experience. It left the Select Committee much smaller than when it was placed before them. The Bill, as it was originally drafted, was a document of forty-nine clauses embodied in twenty-four pages. The Bill, as amended by the Select Committee, is a document of thirty-six clauses embodied in eighteen pages. The work of the Select Committee was not a work of enlargement, but a work of curtailment and deletion. It would not, of course, be within the limits or arrangement prescribed for this article to enter into any detailed criticism of this Bill. It may, however, speaking broadly, be stated that the Bill in its original condition aimed at giving a legislative sanction, in the main, to the remedies suggested by Lord Russell for the removal of the principal abuses connected with the promotion of companies. The energies of the Select Committee of which the Lord Chancellor was the Chairman were devoted largely at his instance to deleting from the measure its most important provisions for the safeguarding of the public from the frauds of the company promoter and director.

It is no exaggeration to say that every one of the clauses deleted from the Companies Bill by the Select Committee was deleted in the interests of the "guinea pigs." The readers of the speeches of Lord Russell and Lord Justice Fry on the iniquity of secret commissions, if they have the most cursory knowledge of the part played by secret commissions in the system of company fraud, will peruse with approval the following provisions in the original Bill dealing with the duties and liabilities of promoters

and directors, and the liabilities of directors in respect of debts and undue preferences, and will learn with amazement and indignation that every word of these clauses has been deleted from the Bill as amended by the Select Committee:—

(1.) Every promoter is in a fiduciary relation towards the company which he is engaged in promoting, and consequently—

(i.) a promoter may not sell or let his own property, or property in which he has an interest, to the company or intended company, and may not be interested in any contract with the company, unless before the completion of the purchase, lease, or contract a full and fair disclosure is made that he is the vendor or lessor of or has an interest in the property or in the contract, and of the nature and amount of that interest;

(ii.) any such contract as aforesaid with respect to which such disclosure is not made shall be voidable at the option of the company;

(iii.) a promoter may not retain for his own use any profit or remuneration, whether in money, shares, or otherwise, arising out of or received by him in connection with the promotion of the company or in consideration of services rendered by him in the course of such promotion, unless full and fair disclosure has been made of the nature and amount of that profit or remuneration, and the company has assented thereto after such disclosure;

(iv.) every promoter shall be liable to account to the company for the amount or value of any such secret profit or remuneration as aforesaid, and to repay the same to the company with such interest as the court may direct.

(2.) Where a person would, by his conduct or dealings in the promotion of any company, or otherwise, have incurred any liability, he shall not be discharged from that liability by reason only of his having acted as agent or on behalf of any person or company in respect of such promotion.

(1.) A director of a company may not, in consideration of his becoming a director or taking any contract or otherwise acting in the company's concerns, or without any such consideration, retain for his own use any remuneration or gift, in money, shares, or otherwise, from any promoter of the company, or from any vendor or lessor to the company, or from any person contracting with the company, or from any person interested in the fulfilment by the director of any contract with the company, unless the remuneration or gift is received in pursuance of a power in that behalf contained in the articles of association, and is expressly sanctioned by an extraordinary resolution of the company, and any remuneration or gift not so sanctioned may be recovered by the company from the director with such interest as the court may direct.

(2.) Every director of a company shall be under an obligation to the company to use reasonable care and prudence in the exercise of his powers, and shall be liable to compensate the company for any damage incurred by reason of neglect to use such care and prudence.

(1.) If any director of a company creates, or is party to the creation of, any debt or liability of the company, knowing at the time of its creation that there was not reasonable or probable ground of expectation that the company would be able to pay or discharge the debt or liability, he shall be personally liable to pay or discharge that debt or liability, but shall be entitled to recover contribution as in cases of contract from any person who, if sued separately, would have been subject to liability on the same ground.

(2.) If any director of a company is knowingly party to any undue or fraudulent preference of any of the creditors of the company, he shall be guilty of a misfeasance within the meaning of sect. 10 of the Companies (Winding-up) Act, 1890.

(3.) If within four months next before the commencement of the winding-up of a company which is unable to pay its debts any director of the company pawns, pledges, or disposes of, otherwise than in the ordinary course of business, any property which he knows to have been obtained by the company on credit and not to have been paid for, or is party to any such pawning, pledging, or disposition, he shall be liable to indemnify the company against any liability to the vendor of the property in excess of the benefit, if any, which the company has received from the transaction, and to pay the amount of that excess to that vendor.

It might have been safely anticipated that a Bill which was not reported to the House of Lords till late in the session would, even if it had reached the House of Commons in due course, have little chance of becoming law. The discussions in that assembly with reference to the restoration of the more important provisions which had been deleted by the Select Committee from the Companies Bill, and the obstruction to which its passage through the House of Commons would have been subjected by the forces arrayed in opposition to the interests of the investing public and of commercial morality would, even if the measure had come down to the House early in June, have rendered its passage through that assembly last session practically hopeless. Care was, however, taken to paralyse for another session any attempt, however meagre, at company reform. The Select Committee presented their report on the 18th May, but the motion to go into Committee of the whole House on the Bill was not made in the House of Lords till the 20th July. The Bill passed through Committee on that day, and was read a third time on the 3rd August, but no proceedings of any kind were taken, after the Select Committee had reported, to get the Bill through the subsequent stages in the House of Lords till Mr. Balfour, in the House of Commons, had made the usual statement on behalf of the Government, as the session nears its termination, specifying the measures which the Government would insist on passing before the close of the session and the measures which they felt constrained to drop. When I asked Mr. Balfour was no measure for the reform of company law, in accordance with the promise in the Queen's Speech, to be placed on the Statute Book, he airily told me that the Bill had not yet come down from the House of Lords. Dates are of importance in this matter. Mr. Balfour's speech announcing the Government programme till the end of the session was made on 17th July, the motion made by the Lord Chancellor in the House of Lords to go into Committee on the Companies Bill was made on 20th July, when all danger of the Bill becoming law during the last session was absolutely at an end.

It may, perhaps, be urged that the charge brought against the Government of confederating with the House of Lords to retard legislation for company reform, and of conniving at the obstruction of such legislation in the Upper Chamber, is scarcely justifiable. The "guinea pig" element in the House of Commons is at least as strong as it is in the House of Lords, and the introduction of a Companies Bill in the House of Lords instead of its introduction in the House of Commons cannot be distorted into an act either of hostility or of treachery to the cause of company reform. This objection, though specious, has little if any weight. Although the company-promoting interest in the House of Commons is strong, that interest should yield to the pressure of public opinion. A measure for the purpose of checking fraud by company introduced as a matter of primary importance by the Government would, of necessity, pass the House of Commons despite the dislike of "guinea pigs," who would know full well that the eyes of their constituents were upon them. The emancipation of the slaves, the disfranchisement of rotten boroughs, and the repeal of the corn laws were measures antagonistic to the interests of many who supported them in the House of Commons, coerced by pressure from without so to do. The House of Lords, who have no constituents to call them to account, and are accordingly less amenable than members of the House of Commons to the pressure of public opinion, can flout more easily the wishes of the people. Delay and obstruction in the interests of fraud by the House of Lords of remedial legislation can be carried to an extent which would not be tolerated in an elected assembly whose members are responsible to their constituents. It is indisputable that the action of the Government in introducing, in successive sessions, the Companies Bill in the House of Lords was prompted by a desire on their part to retard legislation dealing with fraud by company, which they did not dare openly to oppose, or even to neglect.

Many reasons contribute to the sympathetic attitude of the members of the present Government to "guinea pigs." It has, for instance, been stated without fear of contradiction by Mr. Stutfield, a pronounced Unionist, that men of shady reputation in the company-mongering business have been introduced to constituencies with the imprimatur of the Government. Mr. Stutfield, in a letter in the *Daily News*, entitled "Promoters in Parliament," writes:—

> A serious matter, as it seems to me, is the rapid growth of the class of company-mongering M.P.'s and the encouragement which they receive from our leading statesmen. It is notorious that there are men whose presence in the existing House of Commons reflects grave discredit alike on that body and on the constituencies which sent them there. The character of these men was well known when they were selected as candidates; yet they were in every case recommended to the electors, and in one unfortunate instance white-washed by

the leaders of the political party to which they belong. Mr. Balfour thinks that "we shall succeed in maintaining the high level of integrity which has been our greatest glory," and let us hope that he is right. I would ask, however, if that high level of integrity is likely to be preserved much longer if our political leaders continue to lend their moral sanction and support to company-mongers whose financial careers have been the scandal of the business world?

The Government, some of whose leading members have been largely responsible for the introduction of "guinea pigs" into the House of Commons, can scarcely be expected to institute legislation for cramping the trade of the fraudulent company promoter. There is, however, another more powerful consideration which tends to the advantage of the capitalist and company promoter, and their protection from any legislation which will interfere with the profits of their trade, so long as this Government is constituted as at present. Let me speak with plainness. The present Government is pre-eminently a Government of company directors. Large as is the contingent of company directors in the House of Lords and in the House of Commons, the number of company directors amongst the Ministers of the Crown constituting the present Administration is in infinitely larger proportion. Out of 586 members of the House of Peers 162 are company promoters. Out of 670 members of the House of Commons 264 are company directors, whereas out of the 44 gentlemen who compose the present Administration, 25—more than half—are company directors. If we exclude from this computation Ministers of the Crown who have not seats in the Cabinet, and regard the directorial contingent in the Cabinet alone, the result is still more striking. There are nineteen members of the Cabinet; of these no fewer than eleven are company directors. The directorial contingent in the Government is thus indisputably far stronger than the directorial contingent in either of the Chambers of the Legislature, and the favour which it is alleged has been extended by members of the present Government in securing seats in the House of Commons for gentlemen connected with the company promoting enterprise may not uncharitably be attributed to the natural sympathy felt by these eminent men with members of the calling of which they are themselves ornaments.

It is, moreover, of interest to know that the number of directorships held by Ministers of the Crown at the present moment, however enormous, has been decreased by nineteen—nearly one-third—since the accession of this Administration to power in June, 1895. On the 16th August, 1895, it was stated in the House of Commons, without fear of contradiction, that twenty-four members of the Government held among them sixty directorships and trusteeships of public companies, and Mr. Gibson Bowles then

asked, amid loud cheers in all quarters of the House, whether the Government proposed to call on these twenty-four gentlemen to resign these directorships.

We can gauge the considerations under which the sixty directorships held by members of the Government in 1895 have been reduced to forty-one in 1895 by the following announcement which appeared in the columns of the press, embodying a letter from Sir M. Hicks-Beach, written just three days after the admission in the House of Commons that no fewer than sixty directorships were held by members of the Government:—

SIR M. H. BEACH AND THE COUNTY OF GLOUCESTER BANK.

Sir M. H. Beach, Bart., M.P., has definitely decided to sever his connection with the directorate, as well as with the Chairmanship, of the County of Gloucester Bank, in consequence of the position he holds as a member of the Government. The Chancellor of the Exchequer announces his decision in a letter to Mr. H. Butt, who, it will be remembered, promoted and forwarded to the right hon. baronet a memorial, largely signed by the shareholders of the Bank, asking him to continue in office as a director. The letter has been handed to us for publication. It is as follows:—

"Treasury Chambers, Whitehall, S.W., August 19th, 1895.

"Dear Mr. Butt,—I have to acknowledge the receipt, through you, of an address from very many shareholders in the County of Gloucester Bank, congratulating me on my appointment to the office of Chancellor of the Exchequer, and expressing a strong desire that, if compelled on that account to resign the Chairmanship of that Bank, I should at any rate retain the position of a director.

"The address is so largely and influentially signed by persons of all political opinions that I regard it as expressing the view of the whole body of shareholders. I need hardly say that it would give me the greatest pleasure to meet their wishes if I could properly do so; but it is, of course, necessary for me to act in this matter on the two main principles which, as Mr. Balfour recently stated in the House of Commons, have been (as I think, rightly) laid down for the guidance of the members of Her Majesty's Government. The first of these principles is that no member of the Government can enter into any engagement which would occupy the time that would properly belong to the public. My colleagues in the Bank direction have already pressed upon me their willingness to relieve me of all local work; and I think I should have no difficulty in keeping myself completely in touch with the general business of the Bank without in the least degree infringing this rule.

"The second principle is that no member of the Government should undertake any responsibility in connection with public companies that could be supposed to influence his policy, or diminish his usefulness, as a member of the Cabinet or Minister of a department. I trust that I am not capable of being influenced in what I might believe to be my duty as Chancellor of the Exchequer by holding a directorship of the County of Gloucester Bank. But I can easily imagine circumstances in which such a charge might be made against any Chancellor of the Exchequer; and, having carefully weighed the matter, I feel bound to remove all possible ground for any suspicion of the kind by persisting in the intention which I expressed at the half-yearly meeting of resigning my position as a director of the Bank."

Let us take the second principle enunciated in the letter of Sir Michael Hicks-Beach. Is it not an insult to the intelligence of the

public to ask whether, with reference to the introduction and carrying of measures of comprehensive company reform, the present Government—with twenty-five of its members holding forty-one company directorships—have undertaken any responsibility in connection with public companies that could be supposed to influence their policy? The late Mr. Mundella, in a personal explanation with reference to his resignation of the position of President of the Board of Trade, with a seat in the Cabinet, owing to circumstances arising out of the transactions of a company of which he was a director, said, amid loud cheers, on the 24th of of May, 1891: "I think that the public have a right to be sure that there is not the slightest suspicion of conflict between personal and public considerations."

Have the public that assurance when they see legislation to check fraud by company postponed session after session by the strongest Government of modern times, and when they remember that the twenty-five out of the forty-four Ministers who constitute this strongest Government of modern times hold amongst them no fewer than forty-one directorships in public companies? The constitution of the present Administration—an Administration of company directors—must be regarded as the insuperable bar to any honest attempt at company reform as long as this Government is in existence. A Government of this character, in dealing with the amendment of company law, are placed of necessity in an attitude of conflict between personal and public considerations. They become judges in their own cause—a position utterly incompatible with the most rudimentary conception of the administration of justice. The impropriety of a Government of company directors piloting through Parliament a measure of company reform may be estimated by the fact that in 1852 a judgment delivered by Lord Cottenham, as Lord Chancellor, was reversed in the House of Lords by Lord Campbell because Lord Cottenham had adjudicated upon a company matter in which he, as a shareholder, had an infinitesimal interest. Lord Campbell said in this case of Dimes *v.* Proprietors of Grand Junction Canal (3 H. L. R., 793):—

> No one can suppose that Lord Cottenham could be in the remotest degree influenced by the interest he had in this concern, but, my lords, it is of the last importance that the maxim that no man should be judge in his own case should be held sacred. And that is not to be confined to a cause in which he is a party, but applies to a cause in which he has an interest. Since I have had the honour to be Chief Justice of the Court of Queen's Bench we have again and again set aside proceedings in inferior tribunals because an individual who had an interest in the cause took a part in the decision. And it will have a most salutary influence on these tribunals when it is known that this High Court of last resort, in a case in which the Lord Chancellor of England had an interest, considered that his decree was on that account a decree not according to law, and was set aside.

When in July, 1891, Mr. Goschen, who was, during the illness of the late Mr. W. H. Smith, acting as leader of the House of Commons, was asked to grant a return of the members of the Government who were company directors and of the companies which these gentlemen directed, Mr. Goschen declined to grant this return, and his refusal is clearly indicative of the disinclination in high quarters to the direction of public attention to this grave matter. Mr. Goschen said:—

> The hon. gentleman is probably aware that there are means of information within his reach which would show what directorships are held by any particular persons in which the names of the directors are given. I do not think it would be right, with the precedents that exist, that the Government should have recourse to what might be looked upon as an invidious return.

By a recourse to the means within reach—namely, "The Directory of Directors, 1899"—"the invidious return" is appended, for the benefit of the public, to this article. This return is remarkable, not merely for its contents, but for its omissions. Two members of the Cabinet who, from family associations, from commercial training, and from business capacity, might reasonably be expected to be company directors, Mr. Chamberlain and Mr. Goschen, are conspicuous by the absence of their names from this list. The inference is irresistible that these gentlemen know, as business men, that the positions of a Minister of the Crown and of a company director are utterly and wholly incompatible. Indeed, a very notable public utterance of Mr. Chamberlain's confirms the accuracy of this view as the reason of his withdrawal from the directorates of public companies. On the 28th March, 1895, Mr. Chamberlain bitterly denounced the reappointment of Sir Hercules Robinson (Lord Rosmead) to the Governorship of the Cape of Good Hope on the ground of his having been connected, as chairman and director, with trading companies in Cape Colony. Mr. Chamberlain is, as we know, Secretary of State for the Colonies; the Earl of Selborne is Under Secretary of State for the Colonies, and Mr. Chamberlain's subordinate in the Colonial Office. It would be interesting to hear from Mr. Chamberlain a justification of the position of Lord Selborne as a director of the Peninsular and Oriental Steamship Company, with its enormous contracts with the various Government departments, and Lord Selborne's position as Under Secretary of State for the Colonies.

The results of a perusal of the list of Ministers of the Crown who are company directors are somewhat startling. The present Cabinet, which is the largest Cabinet which ever existed, consists of nineteen members, of whom eleven—five peers and six commoners—hold among them seventeen directorships. Of the five-and-twenty gentlemen who are Ministers of the Crown without

seats in the Cabinet, fifteen divide among them no fewer than twenty-four directorships. Three Ministers—Lord Balfour of Burleigh, Mr. Graham Murray, and Mr. Macartney—have each three directorships. The most cursory glance at the list of Ministerial company directors would be sufficient to convince the meanest intelligence that no measure of effective company reform can be expected from the present Government. The chief hindrance to the abolition of fraud by company is a Government of company directors.

It is a matter of congratulation to have the certainty that the Ministerial director will henceforward be confined exclusively to the Administration of one party in the State. On the 14th February, 1899, I moved the following amendment to the Address to the Throne:—

> And we humbly represent to your Majesty that twenty-five out of the forty-four Ministers of the Crown who constitute your Majesty's present Administration hold among them no fewer than forty-one directorships in public companies, and that we consider the position of a public company director to be incompatible with the position of a Minister of the Crown, and that the union of such offices is calculated to lower the dignity of public life.

The speech delivered in the subsequent debate by Sir Henry Campbell-Bannerman, as leader of the Opposition, and the vote given in the division lobby by the members of the Liberal party in favour of the amendment, make it impossible for any member of any future Liberal Administration to continue to fill the position of a director of a public company. The principle laid down by Sir Henry Campbell-Bannerman was that Ministers of the Crown must act in this matter of directorship of public companies on the rule applied to all members of the Civil Service. Mr. Asquith's contention in support of this principle is unanswerable. He said:—

> Supposing, when I was at the head of a public department (the Home Office), I found that one of my subordinates had been engaged as a director in one of these companies, and during office hours had attended to the business of that company, what would be my duty as the head of that department? It would be to censure him, and possibly dispense with his services. How could I perform that duty with clean hands and a clear conscience if I were myself a director of a company and were doing, as the head of the office, the very thing I would not allow my subordinate to do?

The suggestion that the enforced severance of the offices of company director and Minister of the Crown was likely to involve real hardship was summarily disposed of by a remark of a speaker from the Ministerial benches that the nineteen members of the Cabinet divide among them in their official salaries £93,000 per annum, and that members of the Government who are not members of the Cabinet have never complained of inadequate

remuneration for their public services. The trend of opinion was significantly indicated by the fact that of the eighteen members of the House of Commons who took part in this debate calling attention to the anomalous position of Ministers of the Crown as company directors four only attempted to defend the practice, and of these four two—Mr. Balfour and Sir M. Hicks-Beach—were Cabinet Ministers. The *Times*, moreover, which is no Quixotic assailant of the abuses of administration, in a leading article plainly expressed the views of the great mass of the supporters of the present Government on this question. "The chivalry," it said, "of public opinion—if nothing more—is felt to be smirched by the connection, and every Minister who has the courage to rid himself of these directorships will rise appreciably in public estimation."

The second of the principles laid down for the guidance of members of Her Majesty's Government with reference to company directorships, and stated in the letter of Sir M. Hicks-Beach, "that no member of the Government should undertake any responsibility in connection with public companies that could be supposed to influence his policy," proclaims a Government of company directors wholly disqualified while holding these directorships to undertake the work of company reform. Can it be seriously contended that the fact that forty-four directorships of public companies held by twenty-six members of the Government will not influence the policy of the Government, at least to the extent expressed with such charming *naïveté* by Lord Halsbury from the woolsack when explaining the delay in legislation to check fraud by company? "Nothing," said his lordship, "more disastrous could happen to the commerce of the country than any attempt to place shackles on the development of joint-stock companies." Is it not conceivable that the forty-four directorships held by Ministerial profit-takers might—unconsciously, of course—influence the policy of the Government to the extent of minimising the extent of the gigantic system of company fraud, and of regarding that system, in the words of the Lord Chancellor, as "ridiculously small?" May not the directorial fees and salaries unconsciously influence a Government of company directors into a distaste for pressing on legislation which may disturb vested interests, and enable these statesmen to bear the miseries of the victims of Jabez Balfour and of Hooley with resignation? A company-directing Administration must of necessity be foes to company reform.

One of the most serious features of the company scandal consists in the relations of Ministers of the Crown to various companies as directors. No weight should be permitted to attach

to the statement that a Minister of the Crown is precluded from being a director of a public company whose business clashes in any way with that of his own department. The inaccuracy of that statement is glaringly exemplified by the fact that the Under Secretary of State for the Colonies is a director of the Peninsular and Oriental Steamship Company. If the statement was true it would still be extremely misleading. A Minister by his influence, direct or indirect, with his colleagues in other departments of administration can utilise in a manner which may never be exposed to criticism public power for company ends. The departments of administration are not independent of each other. They are, on the contrary, in close and sympathetic communication. No head of a department would venture on a line of policy in his own department without the advice, consent, and cordial co-operation of his Government as a whole. Mr. Gladstone's exposition of the relations of members of a British Administration to each other emphasises this point. He wrote:—

> The business of the State is a hundred times too great in volume to allow of the actual passing of the whole under the mind of the collected Ministry. It is, therefore, a prime office of discretion for each Minister to settle what are the departmental acts in which he can presume the concurrence of his colleagues, and in what more delicate or weighty or peculiar case he must positively ascertain it ("Gleanings of Past Years," I., p. 242).

Let us for an instant suppose that the Secretary of the Board of Trade desired to institute a comprehensive reform of the railway system. He has himself no railway directorships, although he is a director of two public companies. His duties, accordingly, as a Minister of the Crown, in his own department are in railway matters free from embarrassment. But railway reform, though initiated by the Board of Trade, would be pre-eminently a subject which could not be undertaken by the head of that department independently, but must necessarily be a matter of collective Government action. Can it be imagined the duties of the ten members of the present Government who are railway directors would not, as railway directors, clash with their duties as Ministers of the Crown and powerfully affect, and in all probability mould, in the interests of the railway companies the action of the Government? It is well known that Mr. Ritchie, the President of the Board of Trade, regarded at first with much favour the Automatic Brake Bill. That Bill was, however, subsequently dropped. Is it not reasonable to conjecture that its abandonment was a concession to the railway interests in the Ministry? Some light, I think, was shed on the value to companies of Cabinet Ministers as directors by a passage in Mr. Arthur Balfour's speech in defence of the union of the offices of Minister of the Crown and company director on the 15th February, 1899. Referring to the directorship

of a railway company which was retained by Sir M. White-Ridley, the Home Secretary, on becoming a Cabinet Minister, Mr. Balfour said:—

> When the Government was formed my right hon. friend desired to divest himself of his directorship, and he was urgently pressed by the chairman of the company, who is a member of the party opposite, not to do so. My right hon. friend said that, of course, it would be impossible for him to attend the board meetings while he was in office, and they said that, nevertheless, they would be grateful to him if he would consent to remain a member of the board.

Mr. Balfour had proceeded thus far when his speech was interrupted by the following pungent question by an hon. member, "For what purpose?"

I have never seen in any of the reports of the meetings of shareholders of companies any complaint advanced of neglect of duties or non-attendance at meetings of the directorate by a Minister who is a company director. When Mr. Goschen was asked in July, 1891, how it was possible for a member of the Government to attend board meetings, which probably take place once a week, and also to attend to the business of his department, he answered, with delightful *naïveté*, "The question is a question for the shareholders. They have to decide whether they will elect or not elect a member of the Government. They are judges of the importance or otherwise of his presence at the board."

It is, of course, the name of a Minister on the list of directors and not his attendance at meetings that is the desired object. It is not his services in the boardroom, but the sense of power with the Government of the country conferred upon the company in public estimation by having a Minister on its directorate which brings Minister directors into such strong request. "A Minister's good name," said Mr. Beckett, speaking as a supporter of the present Government, "was public property, and his reputation a financial asset, and of that company promoters were well aware."

I am violating no confidence when I mention the fact that a member of the present Government told me that offers had been made to him to permit his name to be added to the list of directors of certain companies, a step which it was urged on him would entail no additional work and no responsibility, and would have placed him—he is not wealthy—in the enjoyment of a handsome income. He spurned the "guinea pigging" proposition.

While I do not desire to associate the kind of business which the twenty-six directors of companies who are Ministers of the Crown perform with the company work with which we are only too familiar in the records of the newspapers, I strongly maintain that the directorial element in the Government renders serious legislation to put down fraud by company absolutely impracticable; that the holding of directorships in public companies by Ministers

of the Crown is calculated to give to those companies advantages and protection to their private interests at the expense and to the disparagement of the interests of the public at large; and, thirdly, that the union of company director with the office of Minister of the Crown stands condemned by the circumstance alone of the Duke of Devonshire's directorship in the Hematite Company provoking the following strictures by Sir Henry Campbell-Bannerman on the 14th February, 1899:—

> I thought at the time that it was rather an odd arrangement that the Duke of Devonshire, who was from circumstances of which we are all aware from his family position necessarily at the head of a great armaments company, should at the same time be the chief of the Committee of the Cabinet which was to determine upon points connected with the defence of the country.

Mr. Gibson Bowles, in his speech on the following day, referred to this matter still more directly. He said:—

> I think that it is very unfortunate, as hematite iron is, I believe, the only sort of iron which is used for making the steel that ships are made of, that the Duke of Devonshire is a member of the Committee of Council on National Defence. I think I may say that no one would entertain the idea that any improper motive would ever influence the Duke of Devonshire; at the same time I do say it is inconvenient and is not dignified for him to occupy both these positions, the more so at this moment because other processes are arising which may drive hematite iron out of the steel trade.

It is no doubt true that no fraud in company transactions has of recent years been brought home to a Minister of the Crown. There are, however, precedents which should warn Ministers of the Crown against transactions which seem to savour of an interest conflicting with their public duty. In the South Sea Bubble crisis Minister after Minister was expelled from the House of Commons for corruption. A Speaker of the House of Commons—Sir John Trevor—was expelled from that assembly for the receipt of a bribe. Three Lord Chancellors of England have been dismissed from the woolsack for pecuniary transactions of a questionable character. In 1805 Dundas, Lord Melville, a Cabinet Minister, was impeached for peculation, and so late as 1857 the notorious John Sadlier, a Lord of the Treasury, was expelled from the House of Commons for frauds in connection with public companies as base as the frauds of Jabez Balfour. Lord Macaulay, in burning words applicable to the system of fraud by company at the present day, has described the rise of stock-jobbing in England at the time of the Revolution in the following terms:—

> Extensive combinations were formed and monstrous fables were circulated for the purpose of raising or depressing the price of shares. Our country witnessed for the first time those phenomena with which a long experience has made us familiar. An impatience to be rich, a contempt for those slow but sure gains which are the proper reward of industry, patience, and thrift, spread through society. The spirit of the cogging dicers of Whitefriars took possession

of the grave Senators of the city, Wardens of Trades, Deputies, Aldermen. It was much easier and much more lucrative to put forth a lying prospectus announcing a new stock, to persuade ignorant people that the dividends could not fall short of 20 per cent, and to part with five thousand pounds of this imaginary wealth for ten thousand solid guineas than to load a ship with a well-chosen cargo for Virginia and Levant. Every day some new bubble was puffed into existence, rose buoyant, shone bright, burst, and was forgotten.

This system of fraud quickly affected the Ministers of the Crown of the day. In 1695 Sir Edward Cook, who was member for Colchester and Governor of the East India Company, on a Bill being passed into law to indemnify him, testified before a Joint Committee of the House of Lords and Commons that he had spent upwards of eighty thousand pounds, entrusted to him as secret service money by the East India Company, in the bribery of the Ministers of the Crown to secure a charter for that company. The evidence given by a man named Bates of the history of a sum of five thousand five hundred guineas given to him by Cook to bribe the Duke of Leeds is as strange as the history of Mr. Hooley's cheque of £30,000 to the Carlton Club. Macaulay writes:—

Bates owned that he had undertaken to bribe Leeds, had been for that purpose furnished with five thousand five hundred guineas, which was then worth at least eight thousand pounds, had offered those guineas to his Grace, and had by his Grace's permission left them lying at his house in the care of a Swiss named Robart, who was his Grace's confidential man of business. It should seem that these facts admitted of only one interpretation. Bates, however, swore that the Duke had refused to accept a farthing. "Why, then," it was asked, "was the gold left by his permission at his house and in the hands of his servant?" "Because," answered Bates, "I am bad at telling coin. I, therefore, begged his Grace to let me leave the pieces in order that Robart might count them for me, and his Grace was so good as to consent." It was evident that if this strange story were true the guineas would in a few hours have been taken away. But Bates was forced to confess that they had remained half a year where he had left them. The money had, indeed, at last—and this was one of the most suspicious circumstances of the case—been paid back by Robart on the very morning on which the Committee first met. Who could believe that, if the transaction could be free from all taint of corruption, the money would have been detained as long as Cook was able to remain silent, and would have been refunded on the very first day on which he was under the necessity of speaking out?

I have recalled these incidents as illustrations of the tendency of any system of widespread corruption in the country to reach and to taint Ministerial circles. Sir Michael Hicks-Beach, in his speech at Swansea, in January, 1898, to which I have so frequently alluded, anticipated an observation which might be made by the audience which had heard his denunciation of fraud by company. "They would say that he was a member of the Government and the Government ought to set the matter right." The first serious step towards company reform must be the weeding out from the Ministry of the Crown of company directors.

APPENDIX.

The following is a list of the company directorships held by members of the present Government. In this list the Naval Lords of the Admiralty and certain officers of the Household who cannot accurately be placed in the Ministry, although they lose office on a change of Administration, are not included :—

MEMBERS OF THE CABINET, 19.

	Directorships.
1. Marquis of Salisbury, Prime Minister and Secretary of State for Foreign Affairs.	University Life Assurance Society.
2. Earl of Halsbury, Lord Chancellor.	North Cornwall Railway Company.
3. Duke of Devonshire, President of Council.	Barrow Hematite Steel Company Limited (Chairman); Furness Railway Company.
4. Viscount Cross, Lord Privy Seal.	Great Central Railway Company.
5. Sir M. White Ridley, Home Secretary.	North-Western Railway Company; Forth Bridge Railway Company.
6. Right Hon. J. Chamberlain, Colonial Secretary.	
7. Marquis of Landsdowne, Secretary of War.	
8. Sir M. Hicks-Beach, Chancellor of the Exchequer.	Economic Life Assurance Society.
9. Lord George Hamilton, Secretary for India.	Pelican Life Assurance Company.
10. Lord Balfour of Burleigh, Secretary for Scotland.	Bank of Scotland (Deputy Governor); National Bank of Scotland Limited (Extraordinary Director); San Puerto Brazilian Railway Company Limited.
11. Right Hon. G. J. Goschen, First Lord of the Admiralty.	
12. Right Hon. A. J. Balfour, First Lord of the Treasury.	
13. Earl Cadogan, Lord Lieutenant of Ireland.	
14. Lord Ashbourne, Lord Chancellor of Ireland.	

MEMBERS OF THE CABINET—*continued.*

	Directorships.
15. Right Hon. C. T. Ritchie, President of the Local Government Board.	Royal Exchange Assurance Corporation; Union Bank of London Limited.
16. Lord James of Hereford, Chancellor of the Duchy of Lancaster.	
17. Right Hon. H. Chaplin, President of the Local Government Board.	
18. Right Hon. W. Long, President of the Board of Agriculture.	Equitable Life Assurance Society; Great Western Railway Company.
19. Right Hon. A. Akers Douglas, First Commissioner of Works.	London, Chatham, and Dover Railway Company.

MEMBERS OF GOVERNMENT NOT IN CABINET (25).

	Directorships.
1. Right Hon. G. W. Balfour, Irish Secretary.	Aluminium Company Limited.
2. Duke of Norfolk, Postmaster General.	
3. Sir J. Gorst, Vice-President of Council.	Chairman of the British Empire Mutual Assurance Company.
4. Mr. H. T. Anstruther, Junior Lord of the Treasury.	
5. Mr. W. H. Fisher, Junior Lord of the Treasury.	Westminster Electric Supply Corporation; Westminster Trust Limited.
6. Lord Stanley, Junior Lord of the Treasury.	
7. Right Hon. R. W. Hanbury, Financial Secretary to the Treasury.	
8. Sir W. H. Walrond, Patronage Secretary to the Treasury.	
9. Earl of Hopetoun, Lord High Chamberlain.	Bank of Scotland (Extraordinary Director); Standard Life Assurance Company (a Deputy Governor).
10. Mr. Austen Chamberlain, Civil Lord of the Admiralty.	Bank of Africa Limited.

MEMBERS OF GOVERNMENT NOT IN CABINET—*continued.*

	Directorships.
11. Mr. W. G. Ellison Macartney, Secretary to the Admiralty.	Clogher Valley Railway Company Limited; Dundalk, Newry, and Greenore Railway Company; London and North-Western Railway Company.
12. Rt. Hon. J. Collings, Under-Secretary to the Home Office.	
13. Right Hon. W. St. John Brodrick, Under-Secretary of State for Foreign Affairs.	Globe Telegraph and Trustee Company Limited; Rock Life Assurance Society.
14. Earl of Selborne, Under-Secretary for the Colonies.	Peninsular and Oriental Steam Navigation Company.
15. Earl of Onslow, Under-Secretary for India.	
16. Mr. George Wyndham, Under-Secretary of State for War.	London, Chatham, and Dover Railway Company.
17. Earl of Dudley, Secretary to the Board of Trade.	
18. Mr. T. W. Russell, Secretary of the Local Government Board.	
19. Mr. J. Powell Williams, Financial Secretary to the War Office.	Midland Railway Carriage and Waggon Company Limited; Scottish Union and Mutual Assurance Company (Birmingham Local Board).
20. Sir R. E. Webster, Attorney-General.	Law Life Assurance Society.
21. Sir R. B. Finlay, Solicitor-General.	
22. Right Hon. A. Graham-Murray, Lord Advocate of Scotland.	Bank of Scotland; Great North of Scotland Railway Company; Standard Life Assurance Company.
23. Mr. C. S. Dickson, Solicitor-General for Scotland.	
24. Right Hon. J. Atkinson, Attorney-General for Ireland.	
25. Mr. Dunbar Barton, Solicitor-General for Ireland.	Arthur Guinness and Company Limited.

The Cotton Mill Towns of New England.

BY EDWARD PORRITT.

MASSACHUSETTS is pre-eminently the Lancashire of New England. In Massachusetts the cotton industry not only of New England, but of the United States, is seen at its best. For that reason, as the object of this article is to give the readers of the Co-operative "Annual" an idea of the economic conditions and the workaday life in the New England cotton towns, Massachusetts is the State selected as typical of the cotton industry in New England.

There are six New England States—Maine, New Hampshire, Vermont, Rhode Island, Massachusetts, and Connecticut. There is cotton manufacturing in all of them; but Massachusetts is the largest of these cotton manufacturing States, as well as the largest cotton manufacturing State in America; and, by reason of its industrial activities and of its school and factory laws, it has long stood at the head of all the manufacturing States. For more than a generation it has led the way in enlightened and humane factory legislation. Its supremacy in the cotton trade has in recent years seemed to be threatened from the fact that its cotton manufacturers have had to compete with the States in the South, in which there are practically no factory laws and no trade unions. The cotton manufacturers, when times were bad, sought to impress the Legislature with the threatening character of the new competition from the South, and to induce the Legislature to take some retrograde steps in respect to factory legislation. But there has been no turning back, and in all matters affecting labour legislation Massachusetts takes first place among the industrial States of the Union. The place Massachusetts now holds in the American cotton trade can be made clear by the quotation of a few figures. At the end of 1898 there were 19,284,135 cotton spindles in the United States. Of these 13,237,376 were in the New England States; 1,753,471 in the five Atlantic coast States, extending from New York to Maryland; 235,044 scattered over the Western States; and 4,057,244 in the twelve Southern States. Of the 13,237,376 spindles in New England, 7,799,872 are in Massachusetts. The

great centres of the trade in Massachusetts are Fall River, which has 2,900,000 spindles and 70,880 looms; New Bedford, with 1,243,500 spindles and 17,454 looms; Lowell, with 989,894 spindles and 29,442 looms; and Lawrance with 658,750 spindles and 11,504 looms. It is with these towns, the Boltons, the Blackburns, and the Oldhams of Massachusetts, and particularly with Fall River and Lowell, that this article is concerned.

The cotton industry in Massachusetts is not nearly so concentrated as in Lancashire. It centres about the large towns. Isolated mill villages are few, and comparatively long distances intervene between one great cotton centre and another. New Bedford, the great spinning centre, is on the coast. Fall River is fifteen miles from New Bedford, with only one mill on the road between the two cities; while Lowell is seventy miles from Fall River, through a country devoted almost entirely to agriculture, with a cotton manufacturing village only here and there. In recent years, the tendency has been to group the new mills in the large cities. Even a good water power is not a sufficient inducement to justify the establishment of mills in isolated villages. Nearly all the operatives in the Massachusetts mills are of the immigrant class, either immigrants or the children of immigrants. Comparatively few people of American parentage go into the mills as operatives. All the new-comers prefer the cities to the country; and it is much easier for a mill superintendent to maintain his full complement of operatives in a mill in a city than in a mill in an isolated village. In consequence of these conditions, the population of all the manufacturing towns has enormously increased during the last two decades, and few modern mills are to be found outside the larger centres of the cotton trade.

THE COTTON MILL TOWNS.

Fall River has the largest population of any of the Massachusetts cotton towns. It is now nearly 100,000, and of this population 28,000 are employed in the cotton mills. The mill population is peculiarly cosmopolitan. Four years ago a census of the mill operatives of Fall River was taken, when it was ascertained that 15,823 were foreign born. The native countries of these new-comers were as follow:—

Canada (English)	217	Portugal	587
Canada (French)	6,056	Prince Edward Island	25
England	6,073	Scotland	344
Germany	64	Sweden	19
Ireland	2,130	Other foreign countries	274
New Brunswick	13		
Nova Scotia	21		15,823

At the time the census at Fall River was taken trade was depressed, and the mills were not employing so many workpeople as when trade was brisk. During the latter part of 1898 trade was improving. It has continued to improve all through 1899; and, with all the mills again working full time, the stream of immigration has swelled. Most of the new immigrants are French-Canadians from the Province of Quebec, and Portuguese from the Azores and the other islands in the Atlantic belonging to Portugal.

Cotton manufacturing began at Fall River in the first decade of this century, when all the workpeople were of New England parentage, and people of this class continued to fill the mills until about the fifties. Then the immigration from Lancashire and from Ireland began. About ten or fifteen years later the French-Canadians began to make their way into the Massachusetts mills, and they have continued to come in increasing numbers up to the present time. There are now so many of them that a daily paper is published at Fall River in the French language. The French-Canadians form the majority of the inhabitants of two or three wards of the city, and there are several French-Canadian members on the Board of Aldermen and on the City Council; while the French-Canadian Catholic Church, which is situated in that part of Fall River known as Flint Village, is as magnificent as many cathedrals.

The figures which have been quoted as to the foreign-born mill operatives are for the city of Fall River only; but inquiries at New Bedford and Lowell elicited the statements that the foreign-born mill workpeople are in about the same proportion there. There is perhaps a larger proportion of Portuguese at New Bedford, as New Bedford was formerly a great whaling port, and had a large Portuguese population long before cotton spinning and weaving were begun there in the eighties, after the whaling industry had failed the city.

The Lancashire immigrants have obviously impressed themselves on the life of Fall River. Men of Lancashire birth, and Irishmen who have come from the Lancashire mill towns, have been the pioneers of the trade union movement; and as one walks through the streets of Fall River, surnames which are local to Darwen and Blackburn, and to Bury and Heywood, occur with remarkable frequency—with a frequency which to a new-comer from Lancashire to Fall River is almost sufficient to engender a feeling of homesickness. In the streets the Lancashire dialect is to be heard at every turn. The last time I was at Fall River a circus parade was in progress. All the mills had been stopped for a couple of hours in order that the workpeople might see the

parade; and, passing in and out of the crowd, the Lancashire dialect and intonation were frequently to be heard, mingled with the patois of the habitant of French Canada who had exchanged his rural surroundings in the old French Province and the rule of the priest for the freer life and larger industrial opportunities of the metropolis of the Massachusetts cotton trade.

As regards the development of the cotton trade at Fall River, it is not possible to trace that Lancashire men have had any large share in it. What I mean is that it is not possible to point to this or that great mill and say that it was built or even managed by a Lancashire man. But the rank and file of the mill population for nearly fifty years have been drawn in a large measure from Lancashire, and were it only in connection with the trade unions Lancashire men and Lancashire ideas have undoubtedly impressed themselves on Fall River, and on most of the larger Massachusetts cotton towns.

Outwardly Fall River is the least attractive of the cotton towns. Its natural situation is remarkably beautiful. It stands on a long hill which slopes down to an arm of the sea; while up on the hill behind the city there is a chain of lakes, the water from which falls into the sea by the river from which the city takes its name. Fall River is classed as a city. Its population and its industrial wealth give it that rank; but it is rather an aggregation of villages than a city; villages which have grown up about the cotton mills. It gives one the impression of a city which has grown too quickly for its municipal treasury. The main streets are paved with large granite sets; but most of the side streets are dirty and unkempt. Scores of the streets are only partially built, and in the industrial sections of the city three-storey tenements are the rule.

For the industrial population there are comparatively few self-contained houses; and, as tenements are inconsistent with gardening and house-pride, as house-pride is understood in Lancashire, there are no gardens, lawns, or trees, and the wooden tenement houses stand bare to the street. Many of the houses lack paint. The streets are unpaved, and generally the industrial residential portions of Fall River present a bedraggled appearance. There is, however, not much smoke in comparison with the Lancashire cotton towns, and the clear atmosphere and the brilliant American skies prevent Fall River from being absolutely depressing.

The cotton mills are the chief attraction of Fall River. There are eighty-one of them, owned by forty-one companies, or corporations, as they are called in New England. These mills are dotted all over the city. Some of them abut on to the principal business streets. Many of them are on the shores of the lakes and the

river. The mills have made the city, and their presence in all parts of it is a continual reminder of the fact that the city has grown up about the mills.

All the mills are built of light grey granite, the formation which underlies the whole of the city. They are as handsome in appearance as mill buildings could possibly be, and, generally speaking, are six or seven storeys high. The walls of many of them are overgrown with Japanese ivy. There are no weaving sheds, as there are in Lancashire. All the departments are under one roof, the two lower floors being usually set apart for weaving. The windows on these floors are very high and of double width. One-storey, sky-lighted rooms would not be possible in the climate of New England. In the summer, when the temperature in the sun is often at 120° to 130°, weaving sheds of the Lancashire type would be unbearably hot; while in the winter, for weeks at a time, the sky-lights would be covered with two feet of snow. When a mill company is engaged only in weaving, the mills are two storeys high, with flat gravelled roofs. All the New England cotton mills are built after this style. The new mills are so wide, high, and well lighted that, although there are twelve or thirteen alleys in the weaving rooms, it is lighter in the middle alleys than in the second or third from the windows in the older mills. All the newer mills have one or two towers, according to the length of the mill. The stairways are in these towers, and the tower rooms serve as the landing or entry for each floor. The towers rise above the mill buildings to afford a place for the belfry.

When the cotton industry was begun at Fall River in 1812, water power only was used, and for many years subsequent to 1812 the mills were grouped on Fall River and driven by water power. The source of the supply was the beautiful lakes which now form one of the greatest attractions of the city. These lakes are known by their Indian name of Watuppa, or the Place of Boats. The chain is eight miles long, and the average breadth is three-quarters of a mile. They cover more than 3,500 acres. They are replenished chiefly from springs, and the quantity of water varies but little with the seasons. The fall from the lakes to the bay is great—132 feet in less than half a mile—hence the Indian name of Quequechan, or Quick-falling Water, by which the river is still known. In this short distance there are eight falls, ranging in height from ten and a half feet to twenty-one feet eight inches.

This water power had much to do with the early history of the cotton trade at Fall River; but at the present time only one of the large cotton mills, that of the Troy Manufacturing Company, is driven exclusively by water power. Many of the mills, as has been stated, are on the shores of the lakes and river; but the chie

advantage of this situation is a never-failing supply of water for boilers and the other uses to which water is put in a modern cotton mill. Part of the chain of lakes is now in the possession of the municipality for the water supply of the city, which ranks among the best of New England city water services. The supply is at the door of the city, and can easily be made adequate to meet the wants of Fall River for generations to come.

In regard to the advantages of water, it is impossible to conceive of a city better placed than is Fall River. The lakes give the city and the mills all the fresh water they can need, and the city has an excellent front to the bay. Large steamers and sailing craft are constantly at the wharves, bringing raw materials to the mills and carrying away their product. Only a small part of the 345,000 bales of cotton needed each year for the mills comes by water. Much of it is bought inland, and is carried by rail from the South. Nearly all the coal, however, is brought to the city by sea. It is obtained in Pennsylvania, and is brought northwards along the coast in immense sea-going barges in tow of steamers, and carted from the wharves to the mills. So far as railway service is concerned, Fall River is no better off than most Lancashire towns. It is practically in the hands of one railway company, and very few of the mills are directly connected with the railway. There is as much carting of raw cotton, coal, yarn, and cloth as in any Lancashire town with which I am familiar. All this carting is done on low drays, which seem to have some obvious advantages over the Lancashire lurry.

New Bedford is a city of an entirely different character from Fall River. It may be described as a Southport or a Lytham, with a factory district on the outskirts. Its industrial history is quite different from that of Fall River. At Fall River, as has been explained, the city grew up about the mills. At New Bedford, the cotton mills were added long after the city had become a place of population and importance. New Bedford owed its early importance to the fact that up to twenty years ago it was the foremost of the Atlantic whaling ports. Up to about 1860 more than 300 whaling vessels had their headquarters at New Bedford, and at this period nearly 10,000 men were engaged in the whaling industry. From about 1860 the whaling business declined, and at the present time not more than twenty New Bedford vessels are engaged in it.

It was the failure of the whaling industry that turned the attention of the local capitalists to the cotton industry. Cotton manufacturing on a small scale had been carried on there since the forties, but it was not until 1881 that the industry began to assume its present proportions. The climate at New Bedford is

admirably adapted to cotton manufacturing, and during the twenty years that the industry has been established there it has been extended so rapidly that in 1899 there were thirty-four large mills, and the city now stands first in the United States in the manufacture of fine cotton goods and fine yarns, and second in the number of cotton spindles. It has 1,243,500 spindles and 17,454 looms. Its population is about 65,000, of whom a little more than 21,000 are employed in the cotton mills. The city stands on sharply rising ground at the head of one of the beautiful inlets of Cape Cod coast. It is a residential city and a summer resort, is one of the Cape Cod coast yachting ports, and, except in the mill districts, has outwardly as little to suggest that it is one of the great centres of the New England cotton trade as Buxton or Southport. Its shopping streets, its public buildings, and its pretty tree-shaded residential avenues all indicate a settled city, a large leisured population, and much local wealth, and suggest an industrial history quite different from that of Fall River or Lowell, the older centres of the Massachusetts cotton trade.

At Lowell the cotton industry dates from 1822, and there, as at Fall River, the city has grown up about the mills and the remarkable system of canals from which two-fifths of the entire motive power is still derived. Lowell is situated on the Merrimac, the second largest of the magnificent New England rivers; and at Lowell the Concord River flows into the Merrimac and forms part of the system of waterways which have had such an enormous part in the development of the cotton industry there. The Merrimac rises in the White Mountains, in New Hampshire, the State to the northwards of Massachusetts. It taps Lake Winnipiseogee, a body of water covering seventy square miles, and it flows past the New Hampshire cotton towns of Manchester and Nashua, and, before it reaches Lowell, which is just over the Massachusetts border, it has already turned more cotton spindles than any other river in the world. At Lowell the Merrimac is as wide as the Thames at Westminster. Just above the city there are falls in the river. At this point the Merrimac is dammed, and the immense head of water so obtained is carried by canals to the turbines in the cotton mills. There are ten of these canals. Each canal is sixty feet wide and eight feet deep. All of them are constantly full of water, travelling at a forceful and rapid rate under the mills, and thence again into the ordinary course of the river. There are sixteen miles of waterway, which cut the city into seven or eight islands. Great as is the power thus furnished by the Merrimac and the Concord, Lowell has long outgrown it, and three-fifths of the aggregate motive power used in the mills is now steam. The figures given me were—water, 20,000 horse power; steam, 30,000

horse power. Even by the mill companies in possession of the water rights water power is not valued as highly as it was in the early days of the industry. Lowell is admirably served by several lines of railway. Spur lines run all over the city, even across the principal streets, and almost in front of the beautiful city hall and public library. Every large mill has direct communication with the railway. Coal is comparatively cheap, and is handled without carting. With the development of cotton manufacturing, new uses have been found in New England as in Lancashire for steam, so that the Lowell water power has not nowadays quite all the advantages it had when the industry was in its infancy, and when Massachusetts was not, as now, gridironed with railways connecting the manufacturing communities with the seaports and the commercial centres like Boston, Providence, and New York. Here it may be parenthetically added that for many years past a large part of the product of the Lowell mills has gone to China, and is carried across the continent over the Canadian Pacific Railway to Vancouver, where it is shipped for the Orient.

In the issue of the Co-operative "Annual" for 1895 I wrote an article describing the great development of the cotton trade in the Southern States of Georgia and the two Carolinas, describing the goods manufactured in these new Southern centres of the trade, and explaining how this new Southern competition in plain cloths, sheetings, and drills was affecting trade in the older-established centres in New England. This new competition, which dates from about 1885, and which has been increasing in recent years, has been more acutely felt in Lowell than perhaps in any other centre of the New England trade. Several of the Lowell mill companies have trade marks in the coarse kinds of cotton goods which have long been favourably known all over the East—so well known, so some of the Lowell manufacturers say, that their success has induced some of the Lancashire mills to copy them.

The goods covered by these trade marks are of the same class as those made in many of the Southern mills, and, as they can undoubtedly be made cheaper in Georgia and the Carolinas than in Massachusetts, three or four of the largest Lowell corporations have within the last few years established mills in the South for the manufacture of their coarser products, and are now making the finer grades of goods in their Lowell mills. These mills are now constantly pushing into the finer grades. They are in 1899 as fully employed as ever they were, and increasingly on those grades of goods with which as yet there is no competition from the South. So far the competition of the South has brought nothing but good to the Lowell mills, for the reason that the mill companies quickly realised that the South has various advantages for the manufacture

of heavy goods, and promptly adapted their business and their plants to the new conditions due to the continuous and immense development in the States which are now manufacturing cotton as well as cultivating it.

Some of the old characteristics of the New England cotton industry still survive at Lowell. The mill companies still own and control numerous boarding-houses in which the mill operatives live. These houses are in the streets immediately adjacent to the mills, usually so near as to be easily within the sound of the mill machinery. The common type of mill boarding-house is a three-storeyed building of brick. All the mill houses are remarkably well kept. The streets are well paved and well cleaned, and most of them are planted with trees.

This system of mill boarding-houses dates from the very beginning of the industry, when the workpeople in the mills were drawn from the New England farms, and long before the immigration from Lancashire, from Ireland, from French Canada, and from the Atlantic Islands of Portugal had begun. In those days it was as necessary to build boarding-houses for the operatives as it was to build mills to house the spinning frames and the looms, as then Lowell was nothing more than a New England village.

When the cotton industry was at this stage of its development the rules that the mill boarders were called upon to obey were almost as strict as those which apply at Oxford and Cambridge to students who have their rooms outside the colleges. I have before me a copy of the rules as they existed in 1851. Then, as now, the boarding-house keepers rented their houses from the mill corporations and collected their pay for the boarders at the mill offices. One of the rules provides that "the tenants of the boarding-houses are not to board or permit any part of their houses to be occupied by any person except those in the employ of the company without special permission." Another rule makes the boarding-house keepers "answerable for any improper conduct in their houses," and sets out that they are "not to permit their boarders to have company at unseasonable hours."

At this period a curfew bell was rung at nine o'clock, and the rules further provided that the doors of the boarding-houses "must be closed at ten o'clock in the evening, and no person admitted after that time without some reasonable excuse." Another of the rules set out that "the keepers of the boarding-houses must give an account of the number, names, and employment of their boarders when required, and report the names of such as are guilty of any improper conduct or are not in the regular habit of attending public worship." The companies paid for the vaccination of their workpeople, and the boarding-house rules provided that "some suitable

chamber in the house must be reserved for the use of the sick, so that others may not be under the necessity of sleeping in the same room." The curfew still rings at Lowell, but there is nowadays no hurrying off the streets when the bell goes, and the mill companies have long since ceased to have any care for "the regular habit of attending public worship." These changes in the social life of the mill operatives came when the people of New England parentage abandoned cotton mill work for better paying and more varied employment, and when their places were taken by immigrants from England and Ireland, and from the French Province of Canada. The boarding-house system has, however, survived these changes. There is no compulsion on workpeople to live in the houses. They choose to do so because they can live more cheaply and better under this system than in any ordinary boarding-house.

The rates for men are $2.25, or nine shillings a week; for women $1.75, or seven shillings a week. The houses are rented to the boarding-house keepers by the mill companies at $6.00, or twenty-four shillings, a month, about one half of their full rental value; and, in addition to the payment for board and lodging from the mill operatives, the mill companies make a payment to the boarding-house keepers of a dollar a month in respect to each inmate. To a Lancashire visitor such a system would seem pernicious, to savour too much of barracks life, and to be contrary to the spirit of the Truck Acts. But it has to be remembered that in all American cities boarding-houses are the rule and private lodgings the exception, and that to most Americans there are only two alternatives, keeping house or boarding.

In the early days of the cotton trade the mill companies had to offer advantages to the farming population to attract them to the mill centres. There was then nothing of the nature of truck in the boarding-house system, for the mill companies made no profit out of it, and the system on this basis has survived the social changes in the mills because it is of advantage to the mill workpeople. It has also had the effect of making Lowell a well-built and compact city, in which respect it differs greatly from Fall River. Even the trade union leaders speak well of the boarding-house system, and its existence has made Lowell the cheapest city in New England as regards rents and living expenses.

Only a small proportion of the mill population now lives in the boarding-houses and in the mill tenements occupied by the operatives with families. The coming of the electric street car, and especially of the bicycle, is serving to carry the mill population, like other people, out into the suburbs, and working a greater change even than the change from American to immigrant labour in the cotton mills.

It is hardly possible to conceive of a more attractive manufacturing city than Lowell. The wide, full, clear, and quick-flowing Merrimac, together with its tributary, the Concord, and the canals add much to its beauty and attractiveness. These water powers have also served to concentrate the mills in the central parts of the city, with the result that, instead of being unduly scattered, and presenting the appearance of a city which has vastly outgrown its municipal resources, and consequently suffered municipal neglect, like Fall River, Lowell is compact, and gives one the impression that its municipality has it well in hand. Its principal streets are as fine and as uniformly well built as any of the best streets in Manchester or Liverpool.

All these larger Massachusetts towns have their own individuality and their own characteristics. Some features are common to all of them. In all of them the school houses are among the finest buildings in the city, and in each there is a magnificent public library. The libraries at Lowell and Fall River would do credit to Manchester or Liverpool. I am familiar with the public libraries in more than a score of the larger American cities—from Boston to Baltimore, and from New York to St. Louis—but I never visited a library which was better planned or better equipped for its work than that at Lowell. It is an art gallery and a public library combined. All the New England manufacturing towns have a great belief in their future. Their past justifies this belief, and in no way is this confidence in their future better shown than in the magnificent scale on which their public libraries are built. These buildings give a metropolitan air to the cities. That at Fall River, more than any other building except, perhaps, the Post Office, relieves the city from the provincialism which otherwise stamps it.

When one inquires into the history of these library buildings he learns that in them has gone some of the wealth which has been made in the city. They represent some part of the many fortunes which have been accumulated in the local industries. Few of the New England manufacturing towns can complain that their wealthy residents ignore the claims of the communities in which they have enriched themselves. These public gifts take various forms. Public libraries are the most common and obvious. At New Bedford, one family, which had enriched itself in the cotton trade, made a gift of £20,000 towards the cost of extending and perfecting the municipal water supply; and Fall River has a drinking fountain erected at the expense, as a quaint inscription tells, of one of its former residents who "as a boy footed it to the music of the factory bell."

There is an excellent service of electric street cars in all the larger New England towns. The lines extend all over the cities, and often reach out to neighbouring towns twelve or fifteen miles away. These outstretching lines add much to the importance of the cities. They serve to concentrate in them the retail trade of the outlying country, as well as to give the residents of the smaller places many of the social and educational advantages of the city. Rural life, as well as city life, is greatly benefited from the social and economic changes which the coming of the trolley car is so rapidly bringing about.

In cities like those I have been describing, containing large industrial populations which have emigrated from Lancashire, it is natural to ask whether the Co-operative movement has obtained any hold. I recently made some inquiries on this subject, but could not find that there were any Co-operative Stores or that there had ever been any. The nearest to them was what were called "dividing clubs." These existed for some years among the cotton mill operatives; but they never got much beyond what may be described as the wheelbarrow stage, that which marked the early days of the movement at Rochdale, and which so soon gave way to Co-operative Stores on a larger and more permanent scale. I sought out a member of one of the Fall River dividing clubs. He told me how the club had been worked—how one of the members was deputed to go regularly to Providence and buy at wholesale, and how the division of these purchases was subsequently made. It was the early Rochdale plan over again. When I asked him why the clubs had not been continued, and the clubs taken a more permanent form, he replied, "The department stores came into Fall River. They cut retail prices down to a fine point, and it was not worth while competing against them."

The department stores are now general throughout the United States. Their beginnings date back ten or twelve years. At first, the stores were established only in the larger cities, such as New York and Boston; but in the last few years the department store has made its appearance in every city of forty or fifty inhabitants. This new departure in retail trade methods stands out as one of the prominent economic developments in the United States during the last decade. It was only in its infancy when the electric car began to replace the horse car in the early nineties, and when street railways began to be pushed ten or twenty miles beyond the municipal limits.

Electric roads have enormously cheapened travel between the smaller villages and the larger towns. They have also quickened it, and made it much more pleasant than travel by railway or by horse vehicles. In New England these electric roads parallel

the railways, and the country is so interlaced with them that it is possible to travel the breadth of a State without using the railways. The electric lines have drawn traffic so largely from the railways that some of the New England companies have laid a third rail down the middle of their roadbeds for the conveyance of electricity, and on lines so equipped they have put on cars propelled by electricity, like those used on the electric railways. These changes in the methods of traction have doubled and trebled local travel, and brought the people from the villages and small towns into a quick, easy, and cheap communication with the cities.

The development of the department store has gone on side by side with this development in travel. The one development has helped the other, and the net result has been that the methods of retail trade have been completely revolutionised. The department stores are usually in the hands of large capitalists. They occupy the most prominent sites in all the retail centres of the cities. They handle all goods except meat, fish, and vegetables. They advertise continuously, largely, and systematically. Their advertisements are the most prominent in all the daily newspapers. These stores are more like Eastern bazaars or English markets than ordinary retail shops. During the busy hours of the day they are thronged with shoppers. Their turnovers are immense, and goods are usually sold on such a uniformly small margin of profit that ordinary single line traders, doing only a small business, are not able to withstand the competition. In all the large cities scores of the old-fashioned single-line traders have been driven to the wall. These men and storekeepers in the rural villages in many of the States have petitioned the Legislatures to protect them from the department stores; and the rural shopkeepers have even objected to the Legislatures granting charters to electric railways because they carry out people who should be their customers to the cities and to the department stores.

Many of the Legislatures have passed laws imposing extra taxes on stores in which more than a given number of classes of goods are sold; but none of these enactments have served to check the movement or furnish any adequate permanent protection to the smaller tradesmen. Manufacturers of such goods as bicycles, pianos, and type-writers in their turn have combined to prevent their goods from getting into the stores, and so to protect the single-line traders and commission agents through whom they hitherto have made their sales. These endeavours, like those of the State Legislatures, have in the end come to naught, because the department stores in their turn have combined, and when bicycle or piano manufacturers refused to supply them with their goods the department stores established factories or contracted for

the entire output of factories already in existence. In the case of articles covered by patents, such as type-writers, they have set inventors to work, and in this way defeated the combinations of manufacturers.

During six out of the last nine years the United States have had the highest protective tariffs in their history. Both the Mc.Kinley tariff of 1890 and the Dingley tariff of 1897, that now in operation, were dictated by the manufacturers, who had only to ask to have any measure of protection they desired. Notwithstanding this fact, retail prices for all manufactured goods during these years have steadily tended downwards; and until the middle of 1899, when there was some advance in prices in all lines of hardware, due chiefly to the recent great industrial combinations, a dollar never went further, and prices were nearer the English level than at any time during my fifteen years' experience of American conditions. In respect to shoes, cotton goods, furniture, and furnishing hardware, my impression is that the American prices have been distinctly lower than English prices. Part of this reduction in retail cost may be due to better methods of manufacture, but most of it is due to the fact that the department stores, by eliminating many of the middlemen, have cut down the margin between the manufacturer and the consumer.

WAGES AND WORKING CONDITIONS.

Wages in the Massachusetts cotton trade vary a little in the different towns. There are no standard lists applicable to all the mills. The wages paid at Fall River are the highest. In the card rooms, slubber tenters run one, one and a half, and two slubbers, and earn from seven to ten and a half dollars a week. Intermediate tenters run two intermediates, 70 to 100 spindles long, and earn on an average eight dollars weekly. Rovers run two speeders of 164 to 196 spindles, and earn from seven to eight dollars. Doffers are paid from three and a half to four dollars. In the weaving rooms the average earnings are from eight to eight and a half dollars for eight looms. Loom fixers' earnings in the mills which accept the list of the Loom Fixers' Union are a little over twelve dollars a week.

Since 1896 automatic looms have been in use in some of the mills in Fall River, and in other of the Massachusetts towns. Throughout New England about 20,000 of these looms are now at work. In mills where these looms are installed weavers attend to as many as twenty-four of them, and are paid day wages. On eighteen looms the pay in Fall River is nine dollars a week; for twenty-four, ten dollars a week.

ILLUSTRATIONS

OF

THE COTTON MILL TOWNS

OF

NEW ENGLAND.

A TYPICAL NEW ENGLAND COTTON MILL.

THE HIGH SCHOOL, FALL RIVER.

MILLS ON THE QUEQUECHAN.

THE WEAVING SHEDS, QUEQUECHAN.

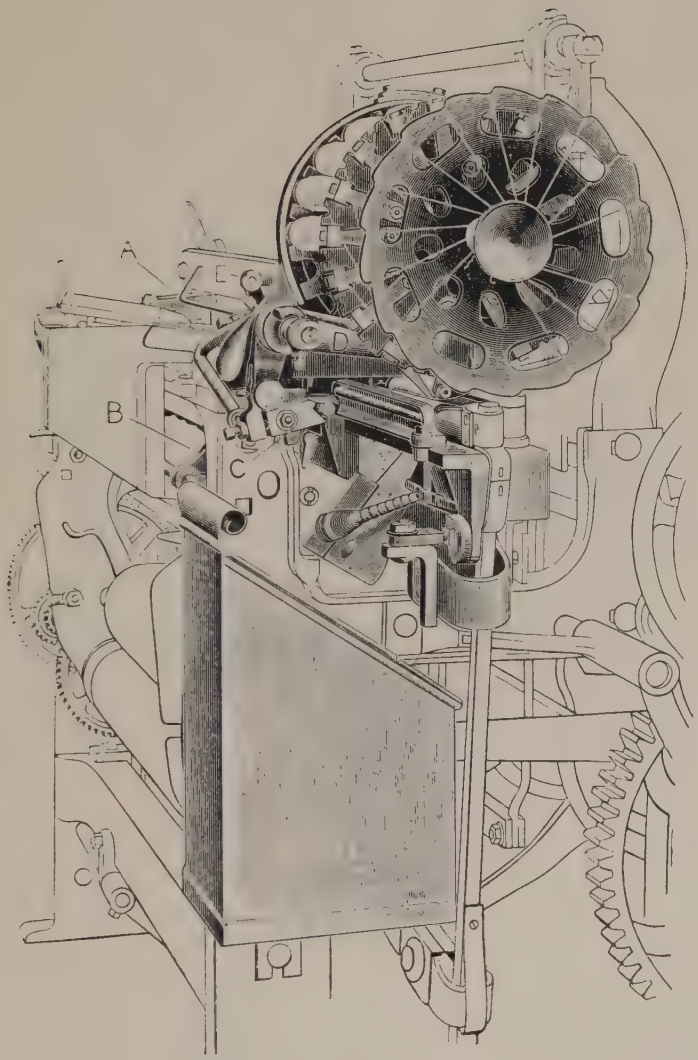
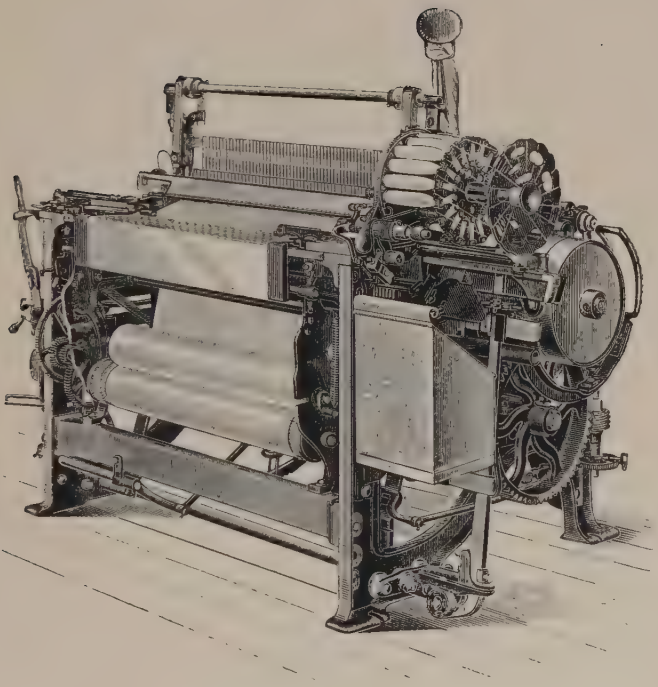


ILLUSTRATION OF HOPPER ACTION (OTHER PARTS OF LOOM IN OUTLINE).



AUTOMATIC LOOM.

The labour saving in these is effected by two distinct devices. There is a filling charger which automatically replenishes the filling supply in the shuttle, and a warp stop motion designed to protect the cloth from damage. By the use of these devices the looms need much less care from the weavers than the ordinary style of looms. About twenty-five cop carriers are loaded into the revolving head of the loom, and when so charged the loom will go for hours without further attention from the weaver unless a thread breaks. Then attention is called to the breakage by the automatic stopping of the loom.

There is a story current in the Massachusetts cotton towns, which had its origin at a meeting of the New England Cotton Mill Superintendents' Association in 1899, that a room full of these automatic looms was left at the dinner hour. All the looms were going when the door was locked. An hour later, when the door was opened, 70 per cent of them were still going, and making good cloth. The other 30 per cent had come to a stand when threads had broken. I have not been able to trace this statement back to the particular mill where the experiment was tried, but no one who has seen the automatic loom at work will be disposed to dispute the probability of some such result from such an experiment. Mill superintendents, trade union officials, and textile school instructors all admit that before long the automatic loom must work great changes in the production of such goods as print cloths and sheetings; while the inventors of the two devices, the revolving head and the stop-gear, assert that the only department of the trade to which their appliances are not yet adaptable is the manufacture of fabrics which must be woven without the chance of a mispick, as the refilling mechanism, as now devised, does not change the filling at the exact moment of expiration. The pictures of the automatic loom which accompany this article will give a good general idea of its mechanism. The change of filling is made by inserting a cop carrier in the shuttle and threading the shuttle automatically, instead of changing the shuttle itself. This change of filling is brought about by a transferring device, controlled from the weft fork, which puts a new supply of filling into the shuttle, and at the same time throws out the empty carrier. A new filling supply is introduced, whether the filling yarn is exhausted or broken.

The invention of the automatic filling changer had to be followed by the invention of an automatic stop-gear if the automatic filler was to be successfully applied. The stop-gear is worked by means of a series of drop-wires through which the warp yarn is drawn before or after leaving the harness eye. It is so devised that the breakage of any thread causes the instantaneous stopping of the

loom. The two appliances which thus go to the construction of the automatic loom are covered by nearly thirty patents. It is claimed for the loom that it so greatly reduces the work of the weaver that one weaver can attend to as many as thirty-two looms. The day wages scale in Fall River is, however, based, as I have stated, on the care of twenty-four or eighteen looms, and I could not learn of any mill in Massachusetts in which the automatic loom is installed in which one weaver attends to more than twenty-four looms.

The loom has encountered no opposition from trade unions. The conditions attending its introduction have been not unlike those attending the introduction of the linotype into the newspaper offices in England. In the case of the linotype, the users of the machine assigned a part of the saving due to it to the operators working the linotype. In this way a newspaper compositor who left his case for a linotype was enabled to earn a larger wage than at the case. In the same way the weavers who are now in charge of the automatic loom are earning higher wages than they could earn on the old style of looms. It is doubtful whether this higher pay will be continued when the automatic loom comes into more general use. It is worth recording, however, that in the earlier years of the new invention some of its advantages went to the operatives who worked it.

No textile State has a shorter working week than Massachusetts. The hours fixed by law for women and minors are fifty-eight a week. The shortest working week in the United States is in New Jersey. There it is fifty-six hours, but New Jersey has practically no textile industries, certainly no cotton manufacturing worth mentioning, and the Massachusetts working week is shorter by two hours than the working week of the neighbouring cotton manufacturing States of Vermont, New Hampshire, Rhode Island, and Connecticut.

In Fall River, and in most of the other Massachusetts cotton towns, work begins at half-past six in the morning, and continues until six in the evening, with only one break of an hour—from twelve to one o'clock—for dinner. On Saturday the mills stop at noon. There are half a dozen National and State holidays in the course of a year. Some of these occur in the middle of the week. None of them extend over more than one day, and there are no full week's holidays such as there are in most of the Lancashire towns, when the cotton towns are half emptied and the workpeople at the seaside. "There is no week at Blackpool or at the Isle of Man for the cotton operatives here," as a Fall River spinner from Lancashire expressed it to me; "no week when everybody is playing."

But while there are no general stoppages, such as there are in Lancashire, the workpeople take weeks off every now and again, especially in the summer time, when the weather is intensely hot, and when work in the mills is exceedingly trying and exhausting. It is then so exhausting that even the strongest and most frugally inclined of the operatives cannot remain steadily at work for longer than seven or eight weeks at a stretch. Then, as my informant phrased it, "they loaf for three or four days or a week." This system of taking half a week or a week's rest is recognised by the mill superintendents, and labour conditions have adapted themselves to it. I asked a weaver how these weeks off were managed. He replied, "There is always plenty of help in the entry." He meant by this that there are always a number of men and women in the tower rooms waiting for either temporary or permanent work. If a weaver who is regularly employed desires to rest a few days, he goes into the entry and obtains a substitute. The substitute's name is entered on the books in the office. If he is employed for a full week, he receives all that there is coming from the looms. If his employment does not extend to a week he is paid day wages by the man for whom he is substituting. He receives this day wage through the office, and the amount is deducted from what is due to the weaver who is regularly employed.

Generally speaking, the relationship between the mill superintendents and overseers and the workpeople is much easier than it is in the Lancashire mills, so much so that new-comers from Lancashire are often surprised at the way in which the workpeople come and go without any permission from the overseers in charge of the room, and yet retain their places. The drive in the mills is perhaps harder than it is in Lancashire; but this drawback is partly offset by the easier conditions of employment. This is true of all industrial life in the United States.

There is not the distance between employer and employed that there is in England. Few American employers consider that they are doing a man a favour by giving him work, or that a man is under any obligation to them because they have given him work. The employé fully realises that if the employer does not give the work to him he will have to give it to some other man; and he realises, too, that the relationship existing between him and his employer is mutually advantageous to both. There is a large degree of equality between employer and employed in most American factories and workshops, and with this equality there is an interchange of ideas and suggestions—an interchange which in many departments of industrial life is to the advantage of the industry, and tends also to the development of the individuality of the workman.

TRADE UNIONISM.

Trade unionism in the cotton industry in Fall River in 1899 is in a better position than it has ever been; but from the first it has had an uphill fight, and the proportion of trade unionists even now, when trade unionism is most flourishing, is not so great as it is in Lancashire. What the proportions are may be judged from the fact that not more than three thousand out of the eight thousand weavers at Fall River are in the union. The oldest of the unions dates from the later fifties, but none of them have a continuous history going as far back as that period. Most of them have had their seasons of great depression and weakness, and at several periods in their history they have all been confronted with empty treasuries.

This was the fate of the Weavers' Union during the season of low prices for cotton cloth and low wages for operatives, which lasted from about 1894 until the end of 1898. When this depression began the Weavers' Union saw that lower wages were inevitable unless they could take some steps to ward off a reduction. They conceived the idea that if the mills were closed for a month there would be a reduction in the stocks of cotton cloth with which the market was overburdened. Accordingly, when the mill companies proposed a reduction of 15 per cent, the union called out its operatives for a month. But this stoppage was confined to Fall River. In the other New England centres of the trade the mills went on manufacturing, and the stoppage at Fall River had no appreciable effect on the market.

At the end of the month the mill companies refused to open the mills for another month, and then only at the reduction which had been proposed. The weavers held out for another two weeks after the second month was up. By this time the money available for strike pay was gone, and the operatives had to submit to the 15 per cent reduction, which was followed a few months later by another reduction of 10 per cent.

The beginning of this depression was in 1892. In that year the highest price for print cloths was $4\frac{1}{16}$ cents and the lowest $3\frac{1}{16}$ cents. In 1893 the lowest price was $2\frac{3}{4}$ cents; in 1894, $2\frac{5}{8}$ cents; in 1895, $2\frac{7}{16}$ cents; in 1896, $2\frac{44}{130}$ cents; in 1897, $2\frac{1}{4}$ cents; while during the summer months of 1898 the price had fallen as low as $1\frac{7}{8}$ cents, and in this year, out of the forty-one mill corporations in Fall River, twenty paid no dividends; and the average dividend on the $25,000,000 embarked in the cotton trade was not more than 2 per cent, and would have been lower than this but for the dividends of the mills which have specialities, and which escaped the depression in the print cloth market.

This period of depression promises to leave a permanent and peculiar mark on the history of the Fall River trade. When things were at the worst, and when cotton cloth was selling at below two cents a yard, the mill treasurers and the banking companies concerned in the print cloth trade got together and organised a trust of a character quite new even in the country which has given birth to the trusts. They chose seven of their number to act as trustees, and two others to act as a selling committee. The mills with print cloths on hand turned over the stocks absolutely to the trustees, and thereafter, instead of each mill treasurer sending to market the product of his own mill, and competing with the treasurers of the neighbouring mills in order to effect sales at any price, the stocks and product of more than fifty mills were all sold through the selling committee acting in association with the trustees under the pooling agreement.

The plan was perfected in November, 1898. About this time trade all over the United States began to be more active and prosperous, and, as stocks of cotton goods in the hands of retailers were low, the selling committee was able to give a dead lift to the prices for cotton cloth, and at one move to put them back from a fractional point below two cents to $2\frac{3}{4}$ cents, almost back to where the prices stood in 1894. This Fall River trust differs from most American trusts in that there was no interference with the capital stocks of the various mill corporations, and no interference with the individual management of each mill except as regards the marketing of the product. It was a temporary expedient. The first organisation was intended to continue only until the end of February, 1899; but it has been continued through 1899, and may at any time take a more permanent form.

The experiment was watched with intense interest all over the country, but by none with more interest than by the trade union leaders at Fall River. They waited until the improved prices for print cloths seemed to be assured and permanent, and then put in demands for a return of some part of the 25 per cent reduction to which the operatives had had to submit in the period when prices were tending so steadily downwards and touching the lowest points in the history of the trade. The demands were well timed. The mill companies were anxious to have no stoppages when the market was tending upwards, and after one conference, which did not occupy more than a couple of hours, a 10 per cent advance was conceded, and new life was infused into all the cotton trade unions at Fall River.

Even with trade at its best, however, the organisation of unions in a cosmopolitan mill population such as that in Fall River presents obstacles unknown to trade union leaders in homogeneous

industrial communities like those of Lancashire. Six thousand of the cotton mill operatives at Fall River are French-Canadians, and these French-Canadians are not all permanent residents there. They are coming and going as trade fluctuates, for as soon as work becomes a little difficult to find the French-Canadian goes back to the old French Province. Many of them return, irrespective of good or bad times in the cotton trade, when they have accumulated a little money.

Most of the French-Canadians come from rural Quebec, where there is little money. They are altogether unaccustomed to industrial conditions, and it is extremely difficult to instil into them the advantages of industrial combination, especially when to obtain these prospective advantages they have to contribute ten or fifteen cents a week to the treasury of a trade union.

The organisers of the trade unions at Fall River are all Lancashire men, or Irishmen who have worked in Lancashire and been identified with trade unionism there. Various special efforts have been made to bring the French-Canadians into the unions. French-Canadian lawyers have been employed to address meetings of French-Canadians in behalf of unionism. French-Canadian organisers have been sought out and engaged. But in spite of these, and other special efforts, the French-Canadians come but slowly into the unions, and they constitute now, as for a generation past, one of the greatest obstacles to trade union progress in Fall River and the other large centres of the Massachusetts cotton trade. They are nearly as troublesome to the factory inspectors as to the trade union organisers. More than any other class in the factory towns they are anxious to get their children into the cotton mills, and have few scruples in affirming that the children are over fourteen—the age at which they are permitted by the school and factory laws to enter the mills. The operatives from Lancashire readily join the unions, and the British-born population of Massachusetts forms the backbone of these organisations at Fall River and in the other cities such as Lowell and Bedford.

The trade unions have had a more successful part in politics in Massachusetts than in any other State. The Legislature is elected every year, and for many years past it has seldom been without two or three members who owed their election to the trade union vote. For several sessions Mr. Robert Howard, a Lancashire man, who was secretary of the Spinners' Union from 1878 to 1897, and who is the historian of trade unionism in Fall River, was a member of the Senate of the Massachusetts State Legislature, and to him more than to any other man is due the fact that the Massachusetts factory code has kept pace with the advance of English factory legislation.

The use to which votes can thus be put, together with the active interest which the industrial portion of the population of Fall River takes in municipal politics, accounts in a great degree for the promptness with which new-comers from Lancashire take out letters of naturalisation and become American citizens. Englishmen in the United States are usually the most tardy of all nationalities in taking the steps necessary for American citizenship. At Fall River, however, clubs are organised to help new-comers to take out their naturalisation papers; and new-comers from England, who have any idea of remaining long, are soon marching to the polls and taking part in ward primaries as full-fledged American citizens.

MUNICIPAL POLITICS.

Municipal politics in Fall River have not much resemblance to municipal politics in England. The democracy is in complete control. To be an alderman or a member of the City Council, a candidate must live in the ward he desires to represent, and, as the cotton mill treasurers and superintendents live in the residential avenues of the city, few of them can possibly be elected either to the Board of Aldermen or to the City Council. Capital has consequently much less voice and influence in Fall River than in the Lancashire manufacturing towns, and most of the members of the municipal bodies owe their election to the industrial vote. All the municipal officers are chosen by the Board of Aldermen and the City Council by joint ballot, and in consequence much of the activity of municipal politics centres about the offices.

The mill companies carry nearly half of the municipal burdens of Fall River. The word "rates" is unknown in American municipal phraseology. All contributions, either to the municipality or to the State, are known as taxes. The mill companies are taxed both by the municipality and the State—by the municipality on the property value of the mills, and by the State on a certain proportion of their capital stock. The municipal assessors are appointed in the way already described—by the Board of Aldermen and the City Council. The State assessors are appointed by the Governor. The municipal assessors, of whom there are three, hold office for three years, and receive a salary of $1,500 a year. The tax rate is at so much a thousand dollars of capital value, and includes charges for schools and for the maintenance of the poor, as well as all the municipal charges. In 1899 the rate was $17.80 per thousand dollars; in 1890 it was $16.40; in 1880 $18.00; and in 1870 $15.30, figures which show that the general tendency of the expenses of local government is to mount upwards in the manufacturing communities of the United States much in the same way as in England.

To illustrate the working of the assessment system at Fall River, I will take the case of the largest mill corporation in the city, the Fall River Iron Works, a corporation which owns four mills, which was organised as far back as 1825, which employs 2,700 operatives, which has a pay roll of $17,000 a week, and whose output of print cloths and wide goods is about 1,170,000 yards a year. All the cotton mills at Massachusetts are assessed under the same system as those at Fall River. The mills are assessed for local taxation (1) on the value of the site, (2) on the value of the mill buildings, and (3) on the value of the spindles, the looms, and the machinery generally. In the case of the Fall River Iron Works Company, which, in its four cotton mills, has 226,000 frame spindles and 7,552 looms, the assessment in the tax books for 1899 stands thus:—

	$
Machinery	2,125,000
Mill Buildings	650,000
Land	117,800
Total	2,892,800

So that the municipal taxation of this company, its contribution to the lighting, improvement, and policing of the city, to the schools and to the cost of the maintenance of the poor, at the rate of $17.80 for each thousand dollars of the valuation, amounts to $51,471.84, or, in round figures in English currency, £10,300.

In a case like this, where the municipal valuation exceeds the capitalisation of the company, no direct State tax is paid. The State tax, known in Massachusetts as the franchise tax, is chargeable only on the difference between the municipal assessment and the sum at which the company is capitalised in those cases where the capitalisation is in excess of the assessment.

Taxing power in the United States is exercised by three distinct authorities—the Municipal Government, the State Government, and the Federal Government. There are no direct Federal taxes; but the cotton mill company pays duties on any machinery, cotton, or yarn it may import; and under the Federal War Tax of 1898, like any other industrial concern, a cotton mill company pays stamp duties on cheques and other descriptions of commercial paper. It should be added that in valuing the land, the mill buildings, and machinery, for municipal taxation, the Massachusetts courts have held that "each of these items should be valued as it is used in connection with others."

Several of the older Fall River mills abut on the principal streets, and the local assessors formerly took the position that these sites should be valued at what they would sell for were the

mills removed. One of the mill companies protested against this method of valuation. It took its protest to the courts, the case went in its favour, and the judges laid down the rule as to valuation which has been quoted. In Massachusetts, as all over the United States, all taxes are assessed on the capital value of the property, and are paid by owners, not by occupiers. The only tax paid by non-property owners is the poll tax, paid by men. In Massachusetts this tax is one dollar a year, and a man must have paid his poll tax before he can vote at any election.

THE FACTORY CODE.

As was stated at the outset of this article, the factory code of Massachusetts is the most advanced of any of the American States, and, moreover, it is better and more uniformly administered than the factory code of any other State. There are no half-timers, and never have been any. The age at which children can go into the mills is now fourteen. If boys and girls who go into the mills at fourteen are illiterates, the law makes the mill superintendents responsible for their attendance at night school until they are sixteen. Certificates of attendance have to be periodically produced, and if a mill company employs minors without these certificates it is liable to a penalty. Except as regards the French-Canadians, there is little antagonism to these school laws, which are loyally accepted by the parents and mill superintendents.

As a rule children in America are treated easily with regard to work. The Italians and the French-Canadians are usually eager to get their children to work, but not much of this eagerness is shown by people of American origin or by the Irish-Americans. As may be judged by the wages paid to doffer boys in the Fall River mills, children leaving school at fourteen earn much larger wages than are paid children of the same age in Lancashire mills. The fact that there are no half-timers is among the reasons accounting for the higher pay received by children when they go into the mills.

As in England, there is no legal limit to the hours which may be worked by men. The factory code, so far as hours of work is concerned, is based upon laws applicable to minors and women. These cannot be employed in any manufacturing or mechanical establishment for more than ten hours a day, except in the case of a breakdown, or when a different apportionment of the hours of labour is made for the purpose of making a shorter day's work on one day in the week. In no case can the hours exceed fifty-eight a week. When there has been a breakdown, the time lost may be made good provided that it is over thirty minutes, but only during the same week, and only after a written report of the day and hour

of the occurrence of the breakdown with its duration has been made to the local factory inspectors. Minors and women can be employed up to as late as ten o'clock at night.

The Employers' Liability Law is much stricter in Massachusetts than in most of the States, for the factory code contains a clause which abrogates the doctrine of common employment and prohibits contracting out. "No person or corporation shall," it reads, "by a special contract with persons in his or its employ, exempt himself or itself from any liability which he or it might be under to such persons for injuries suffered by them in their employment, and which result from the employers' own negligence, or from the negligence of other persons in his or its employ."

As the Particulars Act of Massachusetts followed the passing of a similar law in England, it may be of value to quote it in full, as it shows how British factory legislation is influencing the largest and most prosperous of American manufacturing States.

This Act, which was passed in 1894, and amended in 1895, reads:—

> The occupier or manager of every textile factory shall post in every room where any employés work by the job, in legible writing or printing, and in sufficient numbers to be easily accessible to such employés, specifications of the character of each kind of work to be done by them, and the rate of compensation. Such specifications in the case of weaving rooms shall state the intended or maximum length or weight of a cut or piece, the count per inch of reed, and the number of picks per inch, and the price per cut or piece, or per pound; or, if payment is made per pick or per yard, the price per pick or per yard; and each warp shall bear a designating ticket or mark of identification. In roving or spinning rooms the number of roving or yarn and the price per hank for each size of machine shall be stated; and each machine shall bear a ticket stating the number of the roving or yarn made upon it.

As yet Massachusetts has no law regulating steaming in the weaving rooms, but the factory inspectors check the excessive use of steam under the general clauses in the factory code dealing with the ventilation and the sanitary condition of the mills.

In some particulars the Massachusetts code is more comprehensive than the English code. The inspectors have large powers in connection with the sanitary arrangements of the mills and factories. They have also some oversight of retail business stores. The law compels storekeepers to furnish seats for the women employés, and it is the duty of the inspectors to see that seats are provided. Under the Massachusetts code, tenement-house-made goods have to be so labelled. All ready-made coats, vests, trousers, or overcoats made up in a tenement house used as a factory must have affixed to each garment a tag or label, not less than two inches in length and one inch in width, setting out where the garment was made. This law applies to garments made elsewhere than in Massachusetts which are offered for sale at retail in the State.

Stationary engineers and firemen are also licensed by the factory inspectors. Before a man can take charge of an engine or a boiler in a mill he must be in possession of a certificate obtained after an examination by one of the inspectors of factories. It is further part of the duty of the factory inspectors' department—the Department of State Police, as it is called—to inspect all boilers not insured by the boiler inspection and boiler insurance companies. The inspection by these companies is recognised by the law as adequate. The object of the Act throwing boiler inspection on the State police is to ensure safety in connection with boilers which do not come within the purview of the inspectors of the insurance companies. This Act was passed only as recently as 1898. The need of it was soon shown when the State police began their inspection, for during the first year of the operation of the Act 1,961 boilers were inspected and repairs had to be ordered in respect of 1,133 of them.

The code, the main features of which have been summarised, is both drastic and comprehensive. It protects the workpeople in their economic relations with their employers quite as much as the English code does, and in regard to safety goes some distance beyond the English code. In recent years, since the States in the South began to compete with New England in the cotton trade, manufacturers have complained that it was too drastic. In particular they have complained of the fifty-eight hours working week and of the Employers' Liability Law. They laid their complaints before the Legislature in 1898, but public opinion supports the code as it now exists. It is conceded that it is in advance of the codes of the neighbouring New England States which are largely engaged in cotton manufacture. It is, however, under this code that Massachusetts has achieved its supremacy in the cotton trade, in the shoe trade, and in other lines of industry, and even during the great depression from 1893 to 1898 public opinion in Massachusetts would sanction no retrograde steps in factory legislation. Even as late as 1898, when the condition of the cotton trade was at its worst, the Legislature passed an Act prohibiting the mill companies from making deductions from the wages of workpeople paid by the day when the machinery was stopped owing to breakdowns in cases where the workpeople were detained in the mills while the machinery was being repaired.

The factory inspectors are appointed by the Governor of the State, and hold office for three years. As two-thirds of them are veterans of the Civil War of 1861–65, they cannot be dismissed without cause—that is, they cannot be turned out of office merely because the politicians want the places for other men. The Federal Government in its civil service gives a preference to veterans of

the War. So do many of the State Governments; and in the case of Massachusetts veterans not only have a preference in the civil service, but are protected in the tenure of their offices. There are admittedly some objections to the working of these preference and tenure of office laws; but as regards the State police these laws give the factory inspectors a permanence of tenure and an independence in the discharge of their duties which are helpful in securing a due and uniform administration of the factory code.

Offending employers are summoned before what are known as the District Courts, not as in England before magistrates, with whom the offending employer may be in daily business and social contact. Massachusetts is one of the few States in which the judges are not elected by popular vote. They are all appointed by the Governor, and in the case of the judges who deal with offences against the factory code the tenure of office is seven years.

The factory inspectors work to some extent in association with the trade union officials. Generally speaking, there is little friction in the administration of the factory laws. Mill superintendents occasionally crib time, as they do in Lancashire—the cribbing in Massachusetts mills usually taking place between six and half-past six in the morning. Half-past six is the usual hour for commencing work. When work is pressing, or when a mill superintendent is driven, the practice is to start work ten minutes or a quarter of an hour earlier than usually. To convict a mill superintendent of this offence the factory inspector has to be an eye-witness of the cribbing. Taking the mill superintendents as a class, however, they are loyal to the factory code, and it is not set at naught, as the code is in many States where little more than a pretence is made of factory inspection.

Massachusetts has long ranked high among the law-abiding commonwealths of the United States. This is soon evident to a sojourner in Massachusetts who has been about much in other States. There are many reminders of it. One of the most pleasant is the general attitude of the mill superintendents towards the factory code. When one discusses it with mill superintendents, their attitude seems to be that they have no particular objection to the code, but that they would like to see similar codes equally well administered in the other textile States with which they have to compete.

TECHNICAL EDUCATION.

While the cotton industry in Massachusetts has kept pace with Lancashire in mechanical improvement and development, and in improvements such as the automatic loom has even gone in advance of Lancashire, and while the State Legislature of Massa-

chusetts has kept pace with the British Parliament in factory legislation, in one department of industrial development Massachusetts is distinctly behind Lancashire. Textile Schools there are as yet only in their infancy. In 1899 there are only two Textile Schools in the whole of New England—one established by the State and municipality at Lowell, and the second, a much smaller school, established by the Loom Fixers' Union at Fall River. Up to 1897 nothing had been done in the direction of establishing Textile Schools in Massachusetts, and the only Textile School in the United States was that at Philadelphia.

The new competition with the South is to some extent responsible for the attention which in the last three years has been given to Textile Schools in Massachusetts. When it was realised that the South must more and more encroach on the old position of New England, as far as the manufacture of the coarse grades of cotton goods is concerned, and when it was seen that the New England mills must of necessity push into the finer grades, Lowell began to bestir itself in the interests of textile education. On the initiative of Mr. James T. Smith, the Secretary of the local Chamber of Commerce, the Lowell mill treasurers and superintendents organised themselves and subscribed the nucleus of a fund for establishing a Textile School.

The ideal would have been to establish one large school to serve for the whole of the State of Massachusetts, and while locating it at Lowell to make it a department of the famous School of Technology of Boston. But aid from the Legislature was necessary, and when the plan was discussed the other large cotton manufacturing centres put in their claims. They were not willing to have one school to serve for the whole of the State. Each of the large cotton centres desired a Textile School of its own. The result was that the Legislature passed a general Act, appropriating $25,000 for a Textile School in any city in which there are 450,000 or more spindles. The Act was intended to apply to Fall River, Lowell, New Bedford, and Lawrence. It was a condition of these grants from the State Treasury that the municipalities should contribute $25,000 each to the schools. Lowell was ready to avail itself of this Act as soon as it was passed, and by February, 1897, a school had been established temporarily in a warehouse building, thirty instructors had been engaged, and 237 students had entered for the three years' course.

The school is thoroughly well equipped with the necessary machinery for cotton, silk, woollen, and carpet manufacturing. Most of the machinery was given by the manufacturers of it. The equipment in the cotton department is especially complete. It begins with the cotton gin used on the cotton plantations in the

South, and includes the new machines used for mercerising and the automatic loom. In Lowell it is claimed for the school that it has a more extensive equipment of machinery and plant than any other existing Textile School, whether in the United States or in Europe. There are both day and evening classes. The evening classes are for the operatives who are at work in the mills. The fees for day students are £20 a year. The evening school is free. New Bedford was the second cotton city to avail itself of the grant from the State Legislature. Its school began its work in the autumn of 1899. At that time Fall River and Lawrence were only organising their schools.

The school established by the Loom Fixers' Union at Fall River is noteworthy as being the first endeavour on the part of a trade union in the United States to give its members an opportunity of perfecting themselves in their craft. The Loom Fixers raised the money for the equipment of their school partly by a bazaar and partly by contributions from the mill companies, which gave a very cordial support to the scheme. Experts were engaged by the union, and during the winter of 1898–99, the first season in which the school was opened, thirty-seven of the union members attended the classes. It took much tact and energy on the part of the local secretary of the union to get the school started. Some of the members were jealous of their own knowledge of what they regarded as trade secrets, and were not enthusiastic concerning the project. It was, however, successfully launched, and as a new departure in trade unionism attracted much attention all over New England.

Another fact about the New England Textile Schools is significant. The instructors both in the Lowell and the Fall River schools include men who have gone through the Textile Schools of Lancashire and Yorkshire. New England, as yet, is admittedly behind Lancashire in textile education; but, now that the movement has been seriously taken in hand, it will differ from most other American educational movements if it is not soon put in line with the best that exists, either in Lancashire or in the great textile centres of France and Germany.

Farmington, Conn., 1899.

Association versus Competition:

A Chapter in Social Economic History.

BY HENRY W. MACROSTY, B.A.

I.—1776–1850.

BEFORE COMPETITION.

"THE essence of the industrial revolution is the substitution of competition for the mediæval regulations which had previously controlled the production and distribution of wealth."* Society in the Middle Ages consisted of rigidly-defined classes, each rank dependent on the one immediately above, until finally it was the duty of the Crown not only to maintain social distinctions, but to guard the welfare of all its subordinates. This theory was codified in the Statute of Apprentices (5 Eliz., c. 4, and 1 James I., c. 6), which confined the practice of any trade to those who had served seven years' apprenticeship, fixed a minimum working day of twelve hours, and established a maximum of remuneration, to be assessed periodically by the magistrates, so as to yield a "convenient proportion of wages." The workers, though thus secured in their livelihood, occupied a quasi-servile position, which was intensified when their freedom of movement was curtailed to suit the provisions of the old Poor Law. The settled policy as regards masters was to discourage the development of manufacture on a large scale; the staple woollen industry, for example, being closely regulated as to the number of looms in an establishment, the proportion of apprentices, the quality and size of the cloth. Production, prices, and the division of the product were alike governed by privilege and custom. Further restrictions on trade were introduced by statesmen imbued with the "mercantile theory" of

* Arnold Toynbee, "The Industrial Revolution," p. 85.

the 17th and 18th centuries, which had as its object the limitation of the export of native produce except in exchange for coin or bullion, so that the largest possible quantity of gold, the supposed essence of wealth, might be retained in the country.

When the system of cottage industry began to break down about the middle of last century, owing to the costliness of the raw material and the aggregation of workers into large establishments, the hampering effects of the old legislation became a grievance, and the complaints of the master classes grew in volume when the introduction of new machinery made production on a large scale possible, and the evolution of a separate merchant class directed special attention to foreign trade. On the other hand, the breakdown of the old guild system deprived the operatives of their means of protection, and, while the legal provisions detrimental to them were strictly enforced, the justices allowed the fixing of wages to lapse into desuetude. The Woollen Cloth Act of 1756 again ordered the magisterial fixing of piecework rates, but this labour victory only brought about a capitalist revolt, which dominated Parliament for half a century. The manufacturers were always able to show that the export trade depended on the new machinery, and that that was useless without free labour.

THE PHILOSOPHY OF COMPETITION.

The publication of Adam Smith's "Wealth of Nations" in 1776 supplied the masters with an economic justification of the new industrial policy which was proving so profitable, and they seized on his philosophy with eagerness. For a century economic doctrine was to centre round a totally new conception of the individual man, strongly compounded of the democratic theorising of the French *salons* and the actual development of the English manufacturer. The individual stood separate and apart from all other beings, self-sufficient for all the purposes of his life, fulfilled of all knowledge and wisdom to perceive wherein his true advantage lay. Self-interest, more or less enlightened, was his sole spur to action, and the only motive of which a Legislature could take account. Of such individuals the nation was made up; the national interest was but the sum total of all the individual interests, and would reach its highest point when left to the free play of the contending forces. The business of the State was merely to keep the ring against the intrusion of foreign peoples, and let the combatants fight it out without interference. On the economic side wealth was based on utility, which was not a fixed quality inherent in an article, but depended on the number of things which would be given for it in a free market. Value was thus fixed by unlimited competition.

Later, Ricardo, in 1817, gave a further incorporation to capitalist thought by elevating capital to the supreme position of the necessary precedent to production as being the fund out of which labour was maintained. Malthus had already, in 1798, published his "Law of Population" and discovered the wages fund, and it followed that if labour was supported out of capital and wages were regulated by competition, then, since population increased faster than the means of subsistence, wages must of scientific necessity sink to the bare subsistence level. Never could a political and economic philosophy have been discovered to suit better the requirements of the manufacturing classes of that period, for it at one and the same time secured them absolute freedom of action and reduced the working majority of the population to a condition of abject slavery. No wonder that it gradually won upon Parliament until, in 1811, the victory of individualism was declared by the report of a Select Committee of the House of Commons that "no interference of the Legislature with the freedom of trade, or with the perfect liberty of every individual to dispose of his time and of his labour in the way and on the terms which he may judge most conducive to his own interest, can take place without violating general principles of the first importance to the prosperity and happiness of the community; without establishing the most pernicious precedent, or even without aggravating, after a very short time, the pressure of the general distress, and imposing obstacles against that distress ever being removed." The first fruit of this administrative Nihilism was the repeal of the wage clauses of the Statute of Apprentices in 1813, followed next year by the repeal of the apprenticeship clauses. The old mediæval idea of the legislative protection of the standard of life was now surrendered for the new doctrines of *laissez faire* and salvation by competition.

COMPETITION IN INDUSTRY.

Of the good effects of this teaching Mr. Cooke Taylor says:—*

> The advance in material prosperity and power which the country immediately made under it was such as the world had never before witnessed. Incited by the prodigious stimulus of unfettered freedom of action, and aided by vast accumulations of wealth, enterprise took a thousand new and wondrous shapes and scored a thousand great successes. Nor was this advance confined only to material comforts and conveniences; it carried with it a corresponding advance in civil and religious liberty, in the abolition of political disabilities and hereditary privileges, in the decrease of the military spirit, the reform of manners, and the desire for and diffusion of knowledge. It is scarcely a wonder then that, surveying the new world thus created (by these means principally), the inhabitants of it—especially if they were capitalists—should declare it very good, and have been difficult to convince that there was anything still wanting.

* "Modern Factory System," p. 257.

Already, in 1800, the value of property in England and Wales was estimated at £1,500,000,000, or three times what it had been in the middle of the eighteenth century. By 1812 the estimate had risen to £2,700,000,000 for the United Kingdom; in 1833 it was £3,600,000,000; and in 1845 the income-tax figures gave it as £4,000,000,000. These figures are sufficiently eloquent of the great growth in prosperity, but the fullest development of the industrial revolution had taken place in the cotton industry, which had never been fettered by guild restriction like the woollen trades, and especially in the spinning branch of that industry. During the Great War Britain had had almost a monopoly of the world trade, but after the peace spinning mills arose everywhere on the Continent, and the pressure of this international competition made itself felt in the complaints of the masters, the misery of the workpeople, and the long business crises of the thirties and the forties. The result was a striving to cheapen the cost of production by concentrating the cotton industry in Lancashire, where climatic conditions were specially favourable; by further concentration into larger mills driven by steam power, by technical advancement in dealing with raw material, and by increased use of larger and improved machinery requiring the substitution of adults for children. By these means between 1812 and 1830 the cost of labour in spinning was reduced by 20 per cent, and in some cases 40 per cent. Labour troubles even contributed their share towards the development of industry, for to them the introduction of the self-actor in 1830 was undoubtedly due. Meanwhile it is worthy of notice that in that same year there were only at most some 80,000 power-looms compared with 250,000 handlooms, and that manufacturers declared before the Committee on Manufactures in 1833 that "handloom weavers increase and must increase."

Successful competition depended on the reduction of cost, and that in turn was largely determined by the means of transport and communication. So long as traffic had to be conducted on roads which even in the end of the last century were described as "barbarous and execrable" trade was of necessity kept within narrow limits. The same spirit, therefore, which was urging on the development of manufacture set the best scientific brains to work on the problems of transit, and the outcome was our railway system and our steam merchant navy, the former dating from 1826 and the latter from 1838. Progress at first was slow. By the end of 1842 only 1,857 miles of railway were open, while 1850 saw 6,031 at work, and in the same period traffic receipts had trebled.

But the principle of competition had not yet full scope. Under our tariff system a man was not free to buy where he pleased. The theory of trade favoured by the Government hampered the importa-

tion of foreign goods, and forbade the exportation of machinery and skilled artisans. The market for our manufactures was thereby severely restricted, while the Corn Laws kept up the price of food and kept down the efficiency of labour. The Free Trade agitation was, therefore, essentially a manufacturers' question, based on the principle that export was only possible by import, since goods in the long run were paid for by goods. The crusade against the 1,500 Acts of Parliament which regulated trade went on with growing vigour from 1820, gathering impetus from the success it achieved during the reign of Mr. Huskisson at the Board of Trade from 1823 to 1827, when imports increased 26 per cent, and from the repeal of the East India Company's charter in 1834, when the substitution of free competition for monopoly led to the quadrupling of our Far Eastern trade in ten years. The repeal of the Navigation Acts in 1822 and 1824, and the consequent admission of foreign ships to the same rights of trade as British vessels, was essentially a portion of the same struggle. Finally the fight centred round the Corn Laws, the manufacturers expecting that their abolition would put an end to the hostility of the poor to the rich and at the same time reduce the cost of production. The latter result did, indeed, follow—not, however, as was expected, by reducing wages, but by increasing the efficiency of the workers. It is not necessary for our present purposes to recapitulate the story of the struggle; it is enough to point out that not till near the end of the first half of this century did the principle of free competition in trade obtain a clear field for its activity. Then it found itself provided with a system of machine production capable of great productivity, with reasonably good facilities for transit, and with a new State theory that foreign trade should be left to its own capacities free from tariffs and restrictions.

COMPETITION IN POLITICS.

The philosophy that every man was the best judge of his own interests produced in economics the theory of competition. Transferred to the political sphere it implied that there was no need for a special governing caste, and no utility in class privilege. The middle classes scored their first victory in 1832 by the great Reform Act, and their second in 1835 by the reform of city government. The municipal corporations which had developed out of the mediæval guilds had become close bodies, self-elective, and holding office in life-tenure. The finances were jobbed in the most scandalous fashion, and the management of town affairs neglected disgracefully. Many incorporated towns had dwindled down to mere hamlets, while the new towns which the factory system had

called into existence were left without any government, and developed a town life unsurpassed for its abominations. Parliament could not by a stroke of the pen sweep away all these evils, but it could provide the machinery for reform and leave full play to the interests of the local inhabitants. This was what the political philosophy of the time prescribed, and what was achieved by the Municipal Corporations Act of 1835. All privileges and monopolies, including the special trading rights enjoyed by freemen of the boroughs, were abolished, and the administration was entrusted to a corporation freely elected by the £10 householders. A tangle of some 200 local Acts was swept away, and means provided for the incorporation of new boroughs; under these powers Manchester and Birmingham were incorporated in 1838, and since then about 130 other towns have received the grant of local government. But for this Act and the extending Acts which followed it the great growth of municipal activity which has predominantly characterised the last fifty years would have been impossible, and it deserves a place as one of the most noteworthy legislative achievements of the century.

THE REVERSE OF THE SHIELD.

The work of the individualist theory in destroying privilege and removing the barriers to industrial revolution was of such great utility that it is little wonder that its defenders should have claimed that it had completely fulfilled their expectations. But there was a reverse—and a very black reverse—to the shield. It was of no little importance that the factory system grew up while the attention of our statesmen was entirely directed to foreign affairs. Evils and defects which under other circumstances would have forced themselves on public notice were unobserved and unchecked, while the terror of the ruling classes at the excesses of the French Revolution caused the opposition of the workers to the new system to be put down as rampant folly, and all their efforts at self-defence to be crushed as treason to the commonwealth. Under the mistaken notion that all forms of combination were equally opposed to freedom of contract the Combination Laws were passed in 1799, and the individual workmen were left helpless before their employers. What in theory was a free contract between equal powers turned out in practice to be a contract between persons possessed of very unequal powers of bargaining—a contract between greed on the one hand and starvation on the other. The first factory owners, too, had mostly risen from the ranks, and were generally men of little education and of brutal manners. Backed up by the economists, they set themselves to realise the principle of economy at all cost.

Deprived of their old defences of law and custom, forbidden to combine for their mutual protection, oppressed by the heavy cost of living during the long war, the condition of the workers went on from bad to worse. They were loth to leave the cottage for the factory, and only did so when the old textile industry had been thoroughly disintegrated. Meanwhile the factories were staffed by the poorest of the poor, who could only be forced to regular labour by low wages. Then the men found themselves faced by the competition of their women and children. To send a child to a factory was esteemed a family disgrace, but the manufacturers got the "nimble fingers" they needed from the workhouses, and when the point of honour yielded to starvation the workers found that both for themselves and their children a totally insufficient wage-rate had been established. Even in 1839, according to Dr. Schulze-Gaevernitz, the wages of a man and his wife both engaged in the factory averaged 20s. a week, while 34s. was necessary to provide "the indispensable minimum of clothing and nourishment" for a family of five persons. The wages of handloom weavers fell from 26s. 8d. per week in 1797 to 6s. 4d. in 1832, and yet the competition of the power-loom was practically inoperative during that period. Recourse to public charity brought up remuneration to the bare minimum necessary to drag out a miserable existence.

The horrors of life in the factory—its brutality, its immorality—have been so well burnt into the national memory, so fully expressed in our literature, as to need no recounting here. The "Cry of the Children" still rings in our ears, the sickening story of Robert Blincoe has not quite died out from remembrance, and these are typical of the period when the cash-nexus alone bound man to man, and the welfare of England depended on selling cotton a farthing an ell cheaper than any foreign country.

More powerful, perhaps, in effecting degradation than even overtoil in the factory was the life in the new towns. The wretched pay earned by the workers made the provision of proper food a matter of extreme difficulty and the obtaining of proper housing accommodation an absolute impossibility. A standard of filth was established by the swarms of Irish who came over to England attracted by the demand for labour in the textile districts, and the whole of the working classes speedily sank to that level. Before the Act of 1835 town government practically did not exist, and for many years after it was passed local absorption in money-making created a slough of apathy from which the inhabitants could be only temporarily roused even by cholera visitations. The only law respecting drainage was the ancient and ineffective Statute of Sewers—23 Henry VIII., c. 5—and the poorer quarters of all industrial towns were a collection of abominations, amidst which

herded an overworked, underpaid population. The mortality naturally was excessive, and, terrible as it was, it was only a symptom of the growing physical degeneration of the race. The reports of the Poor Law Commissioners in 1838–9, of the Registrar-General in 1839, of a Select Committee of the House of Commons in 1840, and the special report of the Poor Law Commissioners in 1842, prepared by Mr. Chadwick, gave elaborate accounts of the unsatisfactory sanitary condition of the population, and of the defects of the existing laws. It is not the smallest accusation against the prevailing political philosophy that all this mass of evidence was left in neglect, and a subsequent Royal Commission had to go over the whole ground again in 1843–5 before the principles of *laissez faire* could be shaken.

Although the introduction of machinery into industry was carried out without any regard to existing interests, and the hand-workers suffered severely in consequence, the organisation of manufacture on the basis of individual profit worked on the whole well in the evolution of production. From this statement an exception must be made in respect of transport. Mr. Porter,* writing at the time, said :—

> The *laissez-faire* system, which is pursued in this country to such an extent that it has become an axiom with the Government to undertake nothing which can be accomplished by individual enterprise or by the associated means of private parties, has been pregnant with great loss and inconvenience to the country in carrying forward the railway system.

The extent to which the private greed of landlords and others was allowed to interfere with the public interests found expression in excessive legal expenditure in promoting Bills, and in extortionate compensation, resulting in an estimated waste of £50,000,000. A favourite proposal of reformers at that day was that the Government should map out a system of the most convenient lines of railway communication, and should grant monopolies of traffic in return for an effective control over rates. Such a sane suggestion met with no acceptance, and the Select Committee of 1846 was forced to report that, instead of the expected benefits of competition, railway traffic was a monopoly strengthened by acquired ownership of the canals, adding that "a monopoly subject to no responsibility and under no effective check or control is necessarily an intolerable abuse." An Act had been passed in 1845 for the revision of rates after twenty-one years, but such control was purely illusory, and the complaints of excessive charges and neglect of public interests were to continue for nearly another half century before the evils were checked.

* "Progress of the Nation," p. 336 (1847).

The great financial success which attended the first railways led to a burst of speculation reminiscent of the days of the South Sea Bubble, and prophetic of evils to be caused in the future by the competition of joint-stock capital. In 1836, and again in 1845, the "railway mania" reached prodigious heights; in the latter year 1,263 schemes were before the public, involving £563,000,000 of capital. Collapse followed on credulity, but even the great money loss did not shake the public belief in the divine attributes of enlightened self-interest as the spur to human action.

PHILOSOPHY OF ASSOCIATION.

It is a commonplace of observation among naturalists that animals and plants when exposed to any danger which threatens their race-existence evolve a corresponding method of protection. The same principle of adaptation to environment prevails in the industrial world. The theory of competition proceeds on the assumption that society is simply an aggregate of individuals with mutually exclusive interests, and that the public welfare is but the summation of their mutually cancelling desires. The unrestricted fight of man against man follows as a necessary corollary, bringing with it the calamities we have just sketched. On these lines two results are possible, the degeneration of the race or its maintenance in a state of barbarism, gilded in the higher ranks. We are safe in concluding from our experience that the former would have achieved itself had not biological necessity evoked a counter-active principle —that of association. The theory of competition is contradicted in every particular. We hold that men in society are not self-sufficient units but members one of another, and that the welfare of the community is something apart from and more than the several interests of each. In the phrase of modern science society is an organism, and just as the cells of the human body act in concert locally to repel any attack from noxious elements, so, too, do the human cells of the social organism associate themselves with a more or less wide scope of action to meet any danger threatening their common existence.

Thus, in the evolution of the State, we find the separate groups of the family, the tribe, and the nation. Similarly, in the sphere of industry, we find the workers banding themselves locally and nationally into trade unions—with a regular progression from the shop club through the district union to the federation. Consumers, in like manner, have evolved the organisation of the Co-operative Store with its national ramifications. Finally, the bond of citizenship forms a wider basis for action through the municipality and the central government.

ASSOCIATION OF WORKERS.

In a period when the new organisation of industry was fighting for existence, and, as it succeeded, disrupting the existing order of society, it was not to be expected that the counter-active forces it created should operate on any clearly understood principles. By depriving the labourer of his ownership of the means of production the industrial revolution merged together the interests of all those who worked with their hands, and divided society into "two nations" opposed to each other. The combinations of workmen in defence of their standard of life, therefore, date back to the dawn of the factory system. At first they were directed to the maintenance of the customary order of things, to restriction of apprentices and the legal fixing of wages. Their efforts, however, failed against the growing political strength of the manufacturers and the spread of the new individualist philosophy. Following on the abolition of mediæval guild restrictions, combinations of journeymen were held to be "in restraint of trade," and therefore illegal under the common law, and after numerous special laws had been passed referring to particular trades the growth of trade unionism among textile workers led to the prohibition of all concerted action by the Combination Laws of 1799–1800. Although these laws nominally applied against all combinations they were only enforced against workmen who agreed together for an advance in wages or a reduction in hours or for control over the management of industry. The natural result of the breakdown of the old system of protection and the prohibition of any attempt to create a new one was an outbreak of violence and secret conspiracy. Friendly societies were utilised for trade purposes, secret unions with arbitrary rules and iron discipline were formed, the solidarity of the working classes was maintained by an active illegal correspondence. By the other side the law was enforced with the utmost savagery, to which the workers replied by rioting and machinery-smashing. The Luddite rioters and Captain Swing kept the ruling classes in a state of terror to which they gave expression by the infamous Six Acts of 1819. During the first quarter of this century, in fact, the country was in a state of suppressed civil war. At last the capitalist persecution attracted the notice of the Radical party in Parliament, and a movement for the repeal of the Combination Laws gradually made headway under the nominal headship of Joseph Hume, though the real leader was Francis Place, the Radical tailor of Charing Cross, whose astute management led to a complete victory in 1824. Immediately the barriers were removed the trade union movement received a tremendous impetus, and, as trade was in a period of inflation,

there was a vigorous outburst of large and obstinate strikes. Panic seized the Government, and only the able tactics of Place prevented a complete *volte face*. As it was, a new Act of 1825 re-established the common law doctrine against combinations, but legalised collective action to regulate hours or wages or to withhold labour. In this way was the first workers' charter secured.

The rising hopes were unfortunately soon checked. Financial panic followed on inflation, and the commercial distress at the end of 1825 brought about wholesale unemployment and sweeping reductions of wages. The newly-formed unions at once collapsed, and the workers were completely disillusioned as to the power of sectional action to improve their position. Disbelief in the efficacy of political methods was added when it was seen that the Reform Act of 1832 would not lead to manhood suffrage, and that a timid Whig Administration had no intention of subordinating the interests of manufacture to humanitarianism. When trade revived in 1829, and with it the hope of amelioration, the workers were ripe for revolutionary doctrines, and then began the domination of Robert Owen over the labour movement, an influence which can still be traced in trade union doctrine and phraseology.

Owen cut right at the root of the competitive theory. Denying the individualist conception of man as a being endowed with all economic knowledge and all political wisdom and capable of always ruling events by the unerring discernment of his true interests, he preached that man was the creation of his environment, and that his perfectibility was possible by a wise change in his outward circumstances. This change it was the duty of Government and employers to bring about. Owen came before the public not as a visionary, but as a manufacturer who had applied his principles with conspicuous success in his own business. Nor was he at first a revolutionist; he appealed to his fellow-manufacturers, to Government, and to philanthropists, and it was only when these efforts failed that he went to the workers, who received him gladly. Profit upon cost price was, in his opinion, the cause of all social misery, and until it was abolished reformation of character was impossible. His "New System of Society" was to be brought about by the voluntary formation of self-sufficing communities numbering from 500 to 2,000 individuals, the produce of labour being divided according to the needs of the members. When he failed to obtain from the rich enough funds to make a start with his scheme he modified his plans to suit the framework of the trade unions. Each trade was to be carried on by its union organised into lodges of a convenient size, the several trades exchanging their products on a labour basis, the unit being sixpence for one hour of average labour. "The mine for the miner, the factory for the operative,"

was the new cry for the workers. His propagandist efforts were strengthened by the writings of an able, but now much neglected, group of thinkers who were active about 1825–40, and who, though they gave few ideas to Owen, exercised a powerful influence on his followers. These early English Socialists, among whom Thompson, Gray, Hodgskin, and Bray were the most important, adopted the Ricardian theory that labour was the sole source of value, and deduced from it the logical conclusion that the labourer had the sole right to the whole produce of his labour. Due weight must also be given to the vigorous polemic against the rich conducted by Cobbett, for, although he had nothing in common with Owen and the Socialists, he was virtually their recruiting sergeant. The result of this conjoint teaching was that for a quarter of a century the labour movement was revolutionary and Socialistic in character.

At first the new crusade met with marvellous success. In 1830 there were over 200 Co-operative Societies on the Owenite model; there was a great production of Co-operative newspapers and Socialistic tracts, while paid lecturers preached the doctrine all over the country. Between 1830 and 1835 there were held seven National Co-operative Congresses, and from 1835 to 1846 fourteen Socialistic Congresses. "A positive mania for trade unionism set in," says Mr. Webb, and in a few months half a million members joined the "Grand National Consolidated Trades Union," established in 1834 to carry out Owen's plans by the method of a general strike. The propertied classes were thoroughly alarmed; the childish oaths and initiatory ceremonies which the unions had borrowed from the Freemasons were regarded as evidence of a widespread conspiracy, the violent language used towards employers by workers intoxicated by the new wine of Socialism seemed to the tyrannous employers to foreshadow a new reign of terror. The law officers of the Crown unearthed fusty statutes about conspiracy, and the infamous sentence of seven years' penal servitude imposed on six Dorchester labourers on the pretext of having administered illegal oaths showed the working classes that to combine was still a crime in the eyes of their masters. The employers replied to the new teaching with the most arbitrary intolerance, and insisted that as a condition of employment their operatives should sign a renunciation of trade unionism. Numerous strikes broke out, but the Grand Union had no funds, and in less than twelve months the vigorous prosecution of the masters' policy brought about its complete overthrow. In the same year the Labour Exchanges established by Owen were closed owing to their failure to provide a suitable market for the goods brought to them, and the difficulties attending an equitable system of the distribution of profit had

caused the whole Owenite Co-operative movement to collapse. From this moment the influence of Owen began to decline and his party to be disintegrated. Some of his disciples became, like himself, absorbed in theological controversy; others carried their moral fervour and idealist views into the Chartist movement. To secure control of the government by manhood suffrage and apply its power to the amelioration of industrial distress was the new aim of the working classes, and the movement was only in form political. Carlyle clearly saw its underlying industrial character, and by the perfervid eloquence of his appeals was the first to make a serious breach in the individualist stronghold. The struggle between employers and employed continued, oppression being answered by violence. The harshness with which the new Poor Law was initiated further strained the relations between classes, and the taxes on food were a crushing burden on the poor. A period of bad trade set in in 1838, and the unions once more collapsed. In despair the workers again thought of physical force, but the folly and incompetence of the Chartist leaders worked their downfall. Yet the trade unions never joined the Chartist movement as they had joined the Owenite agitation, though they furnished many of its most ardent supporters. The outburst of revolution all over Europe in 1848 gave the last stimulus to the Chartists, but the movement was already dying, and the failure of the revolt in Paris extinguished the attempts at an English rising. In his "History of Trade Unionism," page 160, Mr. Webb says:—

> Insurrectionism, whether Owenite or Chartist, was, in fact, fast losing its attraction for the working-class mind. A new generation of workmen was growing up, to whom the worst of the old oppression was unknown, and who had imbibed the economic and political philosophy of the middle-class reformers. Bentham, Ricardo, and Grote were read only by a few, but the activity of such popular educationalists as Lord Brougham and Charles Knight propagated "useful knowledge" to all the members of the Mechanics' Institutes and the readers of the *Penny Magazine*. The middle-class ideas of "free enterprise" and "unrestricted competition" which were thus diffused received a great impetus from the extraordinary propaganda of the Anti-Corn Law League and the general progress of Free Trade.

ASSOCIATION OF HUMANITARIANS.

So long as government was the appanage of class there could be no theory of the duty or the extent to which the State should interfere with industry, and while reformers were arduously engaged in remedying the effects of injudicious State control, much impatience was certain to be shown at any suggestion of fresh legislative intervention. Consequently, the fight for the removal of even the most criminal oppression was excessively tedious. The first motive to action was the fear of the spread of infectious disease owing to the horribly insanitary condition of the textile

factories, but to this was soon added a powerful outburst of philanthropic feeling directed towards the protection of the weak. The textile factories were largely staffed by workhouse apprentices, who could have no other protector but the State, and they were the first object of legislation. "The Factory Health and Morals Act," the title of Sir Robert Peel's (the elder) Act of 1802, fully expressed the attitude which its promoters took up, but its well-meaning provisions were nullified by the failure of the method of enforcement. When the workhouse gangs were replaced by the workers' children the invocation of parental responsibility and property in the labour of offspring was successful in preventing legislation, and when, through the efforts of Owen, legislation did come it was limited to the new industry—cotton—and even in its feeble provisions was ineffective. Slowly the small knot of humanitarians gathered strength, fortified by the aid of the trade unions full of Owenite enthusiasm. Oastler, Sadler, Lord Ashley, Fielden, and others forced on the Ten Hours Agitation, and the Royal Commission of 1833 resulted in Lord Althorp's Act of the same year. Employment under the age of nine was prohibited, and under the age of thirteen limited to forty-eight hours a week, factory inspectors being appointed to enforce the regulations. No hours were fixed for the working day, and the system of employing relays of children made the detection of offences impossible. Ten more years of agitation and another Royal Commission were needed before an amending Act was passed in 1844, when the limitation of the hours of young persons to fifty-eight per week marked another stage in the development of the theory that the State must protect the weak. The Ten Hours Act of 1847 definitely established the principle which still largely obtains to-day—that women, young persons, and children must be protected, while adult men must be left to themselves. The rule requiring the fencing of machinery is an interesting example of this principle, for it was applied in 1844 to places where children and young persons work, was extended for the protection of women in 1856, and not made universal till 1878. The really important point, however, about the limitation of women's labour to ten hours a day was that, despite the intentions of the Legislature, it at once fixed the normal day for men, and was fought for by trade unionists in the knowledge that this must follow. This result was brought about by the Act of 1850, which fixed the hours for beginning and ending work, and thereby also killed the relay system.

The first half of this century thus closed with the establishment of the right of State interference in industry, and, although the attempts to control the railways were futile, the principle was strengthened by the passing of the first Sanitation Act in 1846.

II.—1850–1900.

COMPETITION UNDER FREE TRADE.

The turn of the century marked a new era in English industry. The policy of Free Trade was the direct outcome of the creed of universal competition, for as far back as 1820 the Merchants' Petition had declared that "the maxim of buying in the cheapest market and of selling in the dearest, which regulates every merchant in his individual dealings, is strictly applicable as the best rule for the trade of the whole nation." Under the new *régime* full scope was given to the productive power of machinery, and a further impulse was received from the partial removal of hostile tariffs by commercial treaties. The Manchester school of economists gained additional credit from the attribution to their doctrines of results due to the fortunate coincidence of certain events which caused independently a great growth of commerce. The gold discoveries in California and Australia produced a rise in prices favourable to trade and accelerated the settlement of the Colonies; improved means of communication by railways, steamships, post, and telegraph reduced expenses and rendered middlemen unnecessary; the opening of new markets, the railway booms on the Continent and in America, and the discovery of new processes such as the Bessemer method of making steel, contributed towards national prosperity. But the effects of these changes could not be easily distinguished from each other, and their causes were obscured by the dramatic struggle carried on by Bright and Cobden. The old horrors of the factory system, too, had mainly died out, thanks partly to State intervention, partly to the growth of milder manners. Consequently the belief in competition, which had been shaken by the Socialist criticism, received a new lease of life, and we are now able to study it free from disturbing elements. According to Sir R. Giffen, the capital of the United Kingdom, which had been £4,000,000,000 in 1845, rose to £6,000,000,000 in 1865, to £8,500,000,000 in 1875, and to £10,000,000,000 in 1885. From 1850 to 1875 may be called the golden age of competition. Before the Royal Commission on the Depression of Trade and Industry the witnesses always referred to the quinquennium—1865–9—as the period of "normal" trade, and significantly enough it was in those years that the growth of capital was most rapid. Up to 1875 there had been few of those commercial crises which had devastated the industrial world in the thirties and forties, but since then the accumulated effects of currency changes and foreign competition have caused a fall of prices and prolonged periods of depression.

Competition works by underselling. Consumers are usually unable to judge either of the quality of goods or of the conditions under which they are produced or distributed, and consequently, as a rule, go to the retailer who asks the lowest price. The profits of distribution are thus cut down to the irreducible minimum. Retailers in their turn put pressure on the wholesale merchants, and these transfer it to the manufacturers. The manufacturer stands to his customer in the relation of a man who must sell as against a man who need not purchase from any particular person or at any given moment. The whole strain of competition thus falls on manufacturing profits, and just in proportion as competition is free are the savings in production transferred to the customers' pockets. Except where a manufacturer is protected by a patent or by possession of some secret process or of some "proprietary article," there are no longer great profits, scarcely even a living profit, in trade. In this way, the old economists would have told us, competition distributes the advantages of improved production over the whole community. But there are several effects of the process which must be examined more closely.

In the first place, the results of cut-throat competition on trading morality are calamitous. "There is a great consensus of authority," said the *Times* (Dec. 19th, 1891), "in support of the belief that trade is apt to develop a somewhat unscrupulous cupidity," and Sir Edward Fry, an ex-Judge of the Court of Appeal, wrote in a letter to the same paper (Sept. 12th, 1896): "If one inquires whether the morality exercised in the conduct of business in this country is satisfactory or not, and answers this question from the sources of information open to the public, I fear that the answer must be in the negative." Among the examples he gave were adulteration, which is no longer regarded as "legitimate competition;" "the ingenuity exercised in the infringement of trade marks, and the perpetual strain exhibited by rival traders by some device or other to get the benefit of the reputation of some other maker or firm;" frauds in making goods appear better or other than they are—familiar in the law courts through the "linenette" and similar cases; lastly, bribery by commissions, open or disguised, which, as the report of the London Chamber of Commerce has since shown, riddles not only the whole business world but also some of the professions.

Next, the problems of machinery claim attention. Competition lives through reducing the costs of production, and, therefore, there is a constant demand for machinery and processes of increased productivity. In the period 1850 to 1885 the increase in the productive power of machinery has been reckoned to be 40

per cent. The resulting destruction of existing capital is very great —£2,500,000 in the iron and steel industries through the discovery of the Bessemer and open hearth processes. The self-interest of individuals leads to the construction of new factories and to an increased output unnecessary from the standpoint of the community, because if sufficient custom can be attracted by reduced prices from established manufacturers that is all the new-comers ask for. If a new demand were created the increase of production would be justified, but the present inequitable distribution of wealth will not permit the vast classes whose wants are unsatisfied to increase their effective demand. Hence arises the struggle for new markets which forms so large a part of present-day international politics. Leaving this aside as raising questions not germane to the present discussion, we are face to face with the problem that the rich must save, while the poor cannot buy. Saving means directly or indirectly investment in some mode of production with the sole view of the interests of the individual and without regard to the needs of the community. Over-production inevitably results, and, the markets being glutted, a large quantity of machinery and labour is thrown out of employment. In its turn consumption is checked by the fall in incomes, and a period of depression ensues characterised by a fall in prices, diminished production, and a shrinkage in demand; when there has been a sufficient waste of idle capital to use up the congested goods trade once more takes an upward turn, and by and by the cycle is repeated. This is now fully recognised to be the regular course of modern competitive industry.

The improvement of the means of communication has internationalised capital and industry, and the market has spread from restricted localities till it embraces the whole world. Capital, in consequence, can no longer control its own productivity, and the industry of any nation is at the mercy of events occurring in other countries outside its control. Thus the great railway booms on the Continent and in America attracted large amounts of British capital which was locked up unproductively until the railways began to pay. Collapse in each case followed on inflation. Even the power of capital under the direction of individuals to meet extraordinary demands has ultimately operated for evil. The cotton famine during the American Civil War led to the creation by British capital of new sources of supply in India and Egypt, but the over-investment due to unrestricted individual action led to the failure of the City of Glasgow Bank in 1878 and a severe depression in Scottish industry. Similarly the necessity for replacing the stock of goods destroyed during the Franco-German War created a vast but temporary expansion of demand, and induced an extension

of manufacturing enterprise far exceeding the normal requirements of the consumer. This fever of speculation ended in a long depression, and at the same time, since it was not confined to this country, created that additional competition by foreign countries which has so severely hampered British commerce.

As the rate of profit fell through competition capitalists could only secure an adequate remuneration by increasing their turnover and therefore their capital. Larger capital also was required to work the improved machinery and the new processes, and the method by which it was found constitutes the most portentous feature of the last half-century. The system of joint-stock companies under limited liability allowed the aggregation of small capitals into one mass, and led to the formation of large businesses which were at one and the same time the most efficient instruments of production and the most formidable competitors with the individual capitalists. Their success has proved that the motive of private gain which animated the individual trader was not necessary in industry, and that the paid servants of huge corporations were as efficient as the heroes of Samuel Smiles. On the other hand, the ease with which companies were formed caused much unnecessary application of capital, particularly in the textile industry, and great over-production, though in bad times, by spreading their losses over many shareholders, they were better able to weather the storm than their private competitors. They have also seriously increased the growth of speculation. From the passing of the Companies Act of 1862 up to the end of 1897 61,878 companies were registered with a gross capital of over £5,261,000,000, and of these there were actually at work in 1897 only 23,728, with a capital of £1,285,000,000. Still graver are the frauds to which the system has given rise. "The general conclusion," said the Board of Trade in the Report for 1893 under Sec. 29 of the Companies (Winding-up) Act, 1890, "to which an impartial observation of the facts necessarily leads is that under the Companies Acts a wide field has been opened up for the prosecution of objects of a more or less fraudulent character, which did not exist prior to the passing of these Acts, and which would be practically impossible in the case of individuals, private partnerships, or of unlimited companies." The money losses have been severe, but the corruption of public morality which recent scandals have brought to light is much more important. This injury to the national honour, together with the diminished sense of personal responsibility arising from anonymous trading, is so widely acknowledged that it needs no emphasising here.

Competition can only continue so long as it is advantageous to the competitors. It must stop when prices have been reduced to the

margin of profit, for then the competitors—particularly if they have been diminished to a manageable number—see that their real interest lies in combination against the consumer. The perception of this fact is the dominant feature in English industry to-day, and the great bulk of our trade is under one form or another of regulation aiming at the maintenance of profit. In the shop trades, such as grocers, bakers, and chemists, the periodical fixing of prices is familiar to all, but almost every industry has its association of masters which either openly or secretly tries to regulate prices, and, where possible, output. These associations are inherently weak through want of sufficient compulsion over their members and through inability to prevent new capitalists from entering the trade, and there is, therefore, a steady tendency towards some closer and stronger form of union. Most interesting, and at the same time most dangerous, in this respect are the Birmingham "alliances" of masters and men. Cost price is estimated by a committee and a fixed rate of profit insisted upon, while the employés are silenced by a sliding wage scale dependent upon prices and by the exclusive employment of trade unionists; the whole power of the trade union is brought to bear on recalcitrant masters in the interests of the alliance. The final step in the evolution is the emergence of private monopolies by the fusion of competing firms into one company, and in the last few years the movement has progressed by gigantic strides. The English Sewing Cotton Co., J. and P. Coats and Co., the Fine Cotton Spinners and Doublers' Association, the Bradford Dyers' Association, the Yorkshire Indigo Dyers, the unions of the Bradford slubbing and warp dyers, the textile machinery makers, the textile leather workers, the linen thread makers, the calico printers, the linoleum manufacturers, the india-rubber manufacturers, the oil and feeding stuff makers, the washing and wringing machine makers; the associated firms of W. Cory and Sons and Reckitt, Cockerell, and Co., which dominate the London coal trade; the Armstrong-Whitworth, Vickers-Maxim, and J. Brown and Clydesdale Co. amalgamations; the Aberdeen Comb Co.; the Wall Paper Trust—this is a far from compl te list of consolidations, each of which is supreme in its own department of industry. Every prospectus is a protest against "unhealthy and excessive competition"—a revulsion of feeling which reads strangely by the side of the rhapsodies of Smith and Ricardo. This is no accidental development, but the natural outcome of competition cutting its own throat. To quote the *Textile Mercury* (April 22nd, 1899):—"Steadily, although at a rate far less rapid than in the States, amalgamation of kindred concerns is going on within our own borders, and there is nothing to prevent, but, so far, much to encourage further unification of

industrial interests." Incidentally, another confident prediction of the economists has been falsified, for Free Trade is proving no barrier to private monopoly; Protection accelerates but does not cause the evolution. Finally, these large combinations are threatening to extinguish even international competition. The Standard Oil Trust of America controls the European market; international conferences or "shipping rings" fix English freight rates; J. and P. Coats and Co. and the English Sewing Cotton Co. are not only closely connected but they practically form one amalgamation with the American Sewing Thread Co.; the Fine Cotton Spinners and Doublers' Association has acquired a factory at Lille, and the consolidated linen-thread makers have factories in Scotland, Ireland, America, and Hamburg. It has taken us but little more than a hundred years to advance from the cottage industry to the trust, and the dawn of another century sees capital no longer competitive but preparing to enter into new international unions. Free competition is truly dead.

TRADE UNIONISM.

The passing of Chartism and the advent of Free Trade found the workers ready to accept the principle of competition, but they would only compete in their own way. Individual bargaining had led to a bare subsistence wage; individual bargaining, therefore, must cease.

> The main purpose for which workmen unite in trade unions has always been to obtain from their employers, by means of combination, more advantageous conditions of employment than each man could secure as an individual. With this object it is a fundamental principle of trade unionism to replace individual bargaining between the wage-earner and the employer by collective bargaining between the whole body of organised workmen and their employers, and to supersede the separate determination of conditions as between individuals by collective agreements formulating common rules for the workmen in the aggregate.*

Allan and Newton, the founders of the Amalgamated Society of Engineers, initiated the policy of establishing great unions with large reserve funds so that the employers might think twice before attacking them, and, although the career of their society was opened with a great defeat, their policy was enthusiastically adopted by the other workers, especially after the drawn battle in the London building trades in 1860–1. Trade unions, however, were in the eyes of the law illegal societies, and all effective action was prevented by the vindictive application of the Law of Conspiracy. A few isolated

* Manifesto on "The Legitimate Action of Trade Unions," signed by Frederic Harrison, J. M. Ludlow, Henry Crompton, E. S. Beesley, and Sidney and Beatrice Webb.—*Daily News*, December 11th, 1897.

cases of outrage in oppressed trades were assiduously held up by the employers as typical in order to inflame the public mind against the unionists. At last the workmen got the vote in 1867, and could carry their unionism into politics. Aided by the able advocacy of Frederic Harrison, J. M. Ludlow, Professor Beesley, and others, the unions secured legal recognition in 1871, and after a revolt against the Liberal party at the election of 1874 they were placed in 1875 in the same relation to the Law of Conspiracy as other societies.

The governing classes were fortified in their hostility to trade unions by the belief that all attempts to raise wages were futile since wages were paid out of a fixed wages fund. This economic doctrine was always contested by the workmen, who held that wages and profits were paid out of an indeterminate fund and bore no necessary relation to each other, and this contention was ultimately accepted by J. S. Mill in 1869. At first the workers accepted the doctrine that wages should be determined by the demand for and supply of labour, and sought through their unions to obtain a strategic position in the labour market. The labour leaders denounced strikes, and the masters, under the leadership of Mr. Mundella, slowly abandoned their feudal attitude and agreed to meet their workmen at boards of arbitration to settle peacefully the conditions of employment. The principle that wages should follow prices was accepted by both sides, and considerations of convenience led to the fixing of sliding scales controlling the movements of wages over lengthy periods. Between 1867 and 1875 was the golden age of arbitration, and while times were good at least the "aristocracy of labour" profited. But when bad times followed, and prices and wages came tumbling, the trade unionists found that their cherished principle gave occasion for serious inroads on their Standard of Life. The revival of good times synchronised with a humanitarian outburst caused by the "sweating" disclosures and the warm reception accorded to the teachings of Henry George and the Socialists. The unions began again to raise themselves from the slough, and the great victory of the unskilled dock labourers in 1889, won by the aid of public opinion, was the doom of the supply and demand doctrine. The old policy of building up big friendly society benefits had been discredited by the neglect of the unskilled labourers, and from 1888 the Miners' Federation set up the principle of the living wage, long previously adopted by the cotton operatives, that wages must be a first charge on industry not determined by prices or profit, and must be of such an amount as will secure a decent maintenance. This principle was accepted by the public in the "coal war" of 1893, and is applied by the State departments and most municipalities in determining the pay of the persons whom they directly or indirectly employ.

For a long time the use of machinery was fiercely resisted by the workers, since it destroyed their only capital, their skill, and abolished their "vested right" to their trade. Wiser counsels have prevailed, and machinery is now welcomed, provided that no attempt is made to reduce the standard of life by the employment of less skilled and worse paid labourers. The Boot War of 1895 established the doctrine that the competition of workmen displaced by machinery must not be utilised to reduce the wages of those who remain, and joint committees were set up with power to regulate the rate of wages and the conditions of employment. But when the engineers in 1897 proposed the same solution for their machinery troubles it was rejected by the employers as an interference with the management of the workshop, and though this method is rapidly gaining ground it cannot be said to be universally adopted.

After the living wage the establishment of a shorter normal day has been the chief desideratum of the unions. The Lancashire cotton operatives had since the beginning of their history favoured legislative regulation of the hours of labour, and, astutely appealing to the humanitarian feeling in protection of the women and children in factories, they secured, after a fierce resistance from the doctrinaires (which ruined the Liberal party in Lancashire), a legal 56½ hours from the Conservative Government of 1875. As both sexes worked in the same factories, adult men shared in the benefit, and another tenet of political philosophy was shamefacedly or unknowingly surrendered. The engineering and building trades had already gained by a notable strike a nine hours day in 1871–2, but the victory was lost in increased overtime. So thoroughly had the working-class leaders been converted to middle-class economics and politics that up till about 1885 they regarded any application to Parliament as an offence against *laissez faire*, only to be justified in rare cases. The last fifteen years mark a great change, owing to the advocacy of the Socialists and the pressure of the unemployed problem. The annual Trade Union Congress is now one continuous appeal to Parliament, and conspicuous among the demands is the Eight Hours Bill. Political pressure has won an eight hours day for Government employés, but the vigorous fight of the engineers was useless against the strength of the federated employers.

With this lesson thoroughly learned—that combined capital can reduce united labour to the same impotent condition in which the individual labourer stood before his employer—the policy of utilising the political power of the trade unions as an extension of, but not in substitution for, their economic functions wins more adherents every day.

THE FRIENDLY SOCIETIES.

The idea of mutual thrift, of massing together small means so that by utilising the doctrine of averages men might be insured against risks too heavy for them to bear individually, has a respectable antiquity of some two centuries, and a multiplicity of forms, from the local Slate Club to the affiliated Order with its hundreds of thousands of members. Working men and small tradesmen early found that their incomes would not enable them to provide by their own savings against sickness and death, and the industrial revolution upsetting all fixed relations of life proved a powerful inducement towards insurance. Already by 1815 there were 926,000 members of friendly societies. Yet the old Poor Law effectually prevented the exercise of thrift among agricultural labourers, and the Government, suspicious of democracy, did its best to kill the affiliated Orders as secret societies, while it accorded some measure of protection to the local clubs. Ignorance of actuarial principles, which the State did nothing to remedy, caused an immense mortality among the small clubs and serious loss to their members. But when the workers began to feel their self-reliance increase through their association into trade unions; when their social condition was bettered under factory legislation and Free Trade; and when the abolition of the taxes on knowledge removed a great premium on ignorance, a steady development set in in friendly society work, particularly in the great Orders—the Manchester Unity of Oddfellows rising from 47,638 members in 1834 to 434,100 in 1870, and the Foresters from 16,510 to 376,663. There was not a similar growth in money strength, though the larger societies, and particularly those named, were active in financial reforms. Yet, by a curious perversity, the attitude of the State departments was distinctly unfriendly to the democratically-governed affiliated Orders! At last, in 1875, the Government, after an elaborate inquiry, gave the friendly societies their Magna Charta, ensuring to the members a reasonable amount of protection, and providing for the accumulation of reports upon which a correct financial basis could be secured for benefits. Since then membership has gone up by leaps and bounds. In 1892 there were 4,203,601 members of societies whose funds amounted to £22,695,039. Half the membership is in fourteen societies; while in 1897 the Oddfellows (M.U.) and the Foresters alone had over 1,355,000 adult male members, and over £13,500,000 funds. In fact, these two Orders (and the Hearts of Oak) are by virtue of better management winning in the thrift competition? Unfortunately the financial condition of many societies is quite insufficient to meet their liabilities. Much has been done in the last decade by way of improvement, and the elastic constitution of a

friendly society enables it, if it chooses, to modify benefits according to funds. The Workmen's Compensation Act probably lessened the strain or, as in the case of the Miners' Relief Societies, increased the benefits to the injured. But the most serious pressure is due to the burden of old-age pensions under the guise of chronic sick pay.

THE CO-OPERATIVE MOVEMENT.

The object of trade unions is to protect the workers from the destructive forces of competition by erecting the barriers of the Standard Rate, the Normal Day, and Legislative Protection. They admit the existing system of industry, and seek to obtain the best conditions consistent therewith. The Co-operative movement denies the existing system and seeks to replace it by one more equitable. We may look upon industry either from the standpoint of the producer or from that of the consumer. The former is the view of the individualist, the latter the life principle of the movement which began in Toad Lane, Rochdale, in 1844. That the Rochdale Co-operators were in the direct line of apostolic succession from Robert Owen is shown by their objects, which included not only the sale of goods and the building of houses for members, but also the manufacture of goods and cultivation of land to give employment to members out of work or badly paid, and further "to establish a self-supporting home colony of united interests." Their special merit was that they stuck to business, and left idealism to better times. One Owenite principle they carried out in a manner so novel and simple as at once to command success. The old school had sought to eliminate profit-making by selling goods at cost and by instituting a system of labour notes, but both plans were unsuited to business needs. The new leaders sold at current prices and divided "profits" among the consumers according to purchases. In this way so much surplus that otherwise would have gone into the pockets of private traders was socialised, divided among the community so far as the members of the community chose to associate themselves for this purpose. Society was proportionately freed from the autocracy of captains of industry and the greed of the private profit-monger, and by a strictly democratic control of industry secured the satisfaction of its needs in the way it itself should choose, instead of in the way the capitalist might see to be the most profitable. The advantages of the new method of shopkeeping were not long in approving themselves to the working classes, and the incidental benefits of unadulterated goods, cash trading, and an automatic thrift attracted those for whom idealism did not exist. Already in 1851 there were 130 stores in existence; in 1897 there were 1,822, with 1,512,128 members, with a total

capital of £22,984,825, with sales amounting to £59,881,039, and net profits of over £6,000,000. This elimination of the small shopkeeper naturally led to attacks on the wholesale merchant, and after the successful establishment of several corn mills the English Co-operative Wholesale Society was founded in 1863, followed by the Scotch Society in 1868. These bodies are associations of stores (the Scotch Society also admitting its employés), and sell only to stores on the ordinary Co-operative principle. At first they confined themselves to wholesale buying, but in 1873 the opening of the Crumpsall Biscuit Works marked the completion of the chain of development by the undertaking of actual manufacturing. To enumerate the long and well-known list of Co-operative productions is unnecessary here ; their value in 1897 amounted to £2,905,167, while the total sales of the Wholesale Societies in the same year were £16,325,997. There should also be added £3,297,816, the value of goods produced in the productive departments of stores. The manufacturing departments are the most complete answer of the principle of association to that of competition. Industry is directed by the community, so far as the million members of stores federated into the Wholesale Societies are concerned and for the articles they produce, as completely as in a Socialist state, and "profits" are communalised and divided among the members in proportion to their trade, so that wants are virtually satisfied at cost price. Indeed, it is a misuse of economic terms to speak here of profit in the usual sense, which means buying from one man at one price and selling to another for a higher sum. The Co-operator buys from and sells to himself, and merely shifts his money from his breeches to his waistcoat pocket. True profit can only be earned by sweating the employés, and this is only done in excessively rare instances, Co-operators being always the foremost in the just treatment of labour.

The stores have not been exempt from the scorn which has always been showered on the "mere shopkeeper," and quite an undue amount of honour has been given to another form of co-operation. Borrowing two delusions of the old political economy, that the aim of society is production and not consumption, and that only productive labour is beneficial to the community, the Christian Socialists—Kingsley, Maurice, Ludlow, Hughes, and Neale—sought to reform society by remodelling the method of employment. Associated bodies of workmen were to supply their own capital, choose their own managers, and divide among themselves all the proceeds of their labour. A number of such self-governing workshops were started after 1849, but by 1852 they had collapsed owing to want of discipline and business ability. Where these defects were avoided, as in the Lancashire "co-operative" cotton

mills, the businesses degenerated into joint-stock companies, in which the shareholders might be operatives, but took care to work in other mills. To-day, to quote Mr. H. D. Lloyd, *"the idea of a self-governing workshop, an independent, individualised group, self-owned, self-directed, and self-absorbed, has been as definitely abandoned as the earlier idea of a colony." Then followed a period in which the trade unions tried to emancipate themselves from the capitalist by undertaking "self-employment in associative workshops," particularly in the engineering trade, but a series of disastrous failures proved their inability to cope with the private manufacturer. Finally the grandiose idea shrank up into various plans of profit-sharing, now revived under the more attractive title of labour co-partnership.

Profit-sharing is either a bonus for extra exertion or it makes the remuneration of the worker dependent on operations in the market which he cannot control. The sharing of losses means a breach in the dam of the standard rate which the trade unions have painfully built up. Individualist productive societies or labour co-partnerships do not eliminate competition, but must fight for their existence in the open market like any capitalist undertaking. The stores and their productive departments, on the contrary, remove their trade definitely from the sphere of competition and work for an assured market. Indeed, those other productive societies which are successful owe their success mainly to the fact that their capital is largely held by stores, which at the same time form their chief market. Nowhere do the employés hold a preponderating share of the capital, and the circumstance that the accumulated savings of the working classes fall short of the annual savings of the propertied classes shows the impossibility of successful working-class competition with capitalists.

THE ASSOCIATION OF CITIZENS.

We can regard society as a corporation of citizens associated together for the satisfaction of their needs. Hitherto it has seemed good to rely upon individual effort and private interest for the fulfilment of the ends of the association, but the power has always remained innate in society to act corporately when its welfare was threatened by the antagonism of its component parts. This denial of the old atomistic view has been powerfully supported by the application of evolutionary ideas to political science. Said Professor Huxley:—†

> I am unable to see that civil society is anything but a corporation established for a moral object—namely, the good of its members—and, therefore, that it

* "Labour Co-partnership," p. 222.

† "The Struggle for Existence."—"Nineteenth Century," Feb. 1888.

may take such measures as seem fitting for the attainment of that which the general voice declares to be the general good. . . . I conceive it to be demonstrable that the higher and more complex the organisation of the social body the more closely is the life of each member bound up with that of the whole, and the larger becomes the category of acts which cease to be merely self-regarding, and which interfere with the freedom of others more or less seriously.

We have not arrived at this position by one leap, but through the slow and painful compulsion of experience. As we have seen, the first step in the evolution of the social idea was the acknowledgment of the responsibility of the State for the weak and helpless, a principle established firmly by the Ten Hours Act of 1847. Further acquaintance with industrial affairs showed that the adult man was in respect of a large portion of his activity in the same position as the woman or child. A factory operative cannot make his own bargain with his employer as to fencing of machinery, or ventilation, or sanitary conveniences, or safety of processes, and if he had the power to bargain he has not usually the scientific knowledge necessary for his protection. Consequently, the State has had to step in and undertake the regulation of these matters, otherwise the forces of competition would give an undue advantage to the bad employer. Since 1847 no long interval of years has elapsed without some Act being passed either to bring some new industry under the factory laws or to add some new detail of protection. Each case has been dealt with independently as the necessity arose, and it is somewhat difficult to discern any common principle running through this haphazard legislation. Yet we may assert that it is almost universally acknowledged that it is a prime duty of the State to safeguard its workers from the risk of ill-health or accident arising out of their trades. The latest extension of legislative interference may be seen in the Workmen's Compensation Act and in the regulation of dangerous trades, particularly in the admission that for the sake of future generations it may become necessary to prohibit certain processes altogether.

The necessities of life in towns have led to another though similar extension of State control. Successive epidemics of cholera taught the dearly-bought lesson that the competition of house-builders and slumowners could not be relied upon to ensure healthy dwellings and a not undue density of population. A whole code of public health law, a great Government department, and a mighty army of local officials now form the defences of a standard of sanitation which might be raised considerably higher without becoming utopian. The *laissez faire* period worked such havoc in the towns growing up under the factory system that the reformed municipalities early found themselves faced by the problems of an

insufficient water supply and overcrowded slums. They were in no hurry to deal with them, and, conformably to current economic notions, handed over the water supply to private companies. When the tyranny of private monopoly made itself felt the companies were bought out and a municipal supply substituted, with excellent financial results. This naturally suggested a similar treatment of other "natural" monopolies—gas, electric light, tramways, ferries, and so on—until to-day the commercial world has taken alarm at the spread of municipal trading. Yet, after all, the ousting of the manufacturer or trader by the consumer or municipality is only the logical sequence of the ousting of subordinate producers by the large manufacturer who now makes in his own factory a large number of goods incidental to his main business which formerly he would have obtained from so many separate makers. Another portion of municipal trading is the working up of the bye-products which it produces in the course of its disposal of sewage and refuse, and the charge against the municipality is exactly that it makes inroads on the territory of competition, that it does its own work and supplies its own needs, and that in dealing with its workpeople it throws aside the law of supply and demand; yet the growth of its activity has not been due to preconceived notions about the sphere of the State but to the resolve of hard-headed, and usually individualistic, citizens to protect the best interests of their towns against profit-mongering shareholders. The housing problem has run a similar course. Quite apart from the slum question, we see that the "competition" of builders—which is quite free—and the monopoly of landowners have ended in a crushing burden of rent on town dwellers for houses with insufficient accommodation and a too scanty supply of light and air. The town community is now coming to see that it must end its own rent-raising competition by undertaking co-operatively through its municipality the provision of houses for its citizens.

The State Manufacturing Departments of the Admiralty and the War Office are a natural confession that it is impossible to leave the supreme function of national defence entirely at the mercy of the private trader. The recent glimpse which we had of the serious results which might have followed in a period of European complications from the delay of the naval construction programme owing to the great engineering dispute has driven this home to all except those enthusiasts of competition who would hand over the conduct of war itself to private companies. And this principle once established cannot be limited to ironclads or soldiers' uniforms —a supply of cotton cloth is as necessary to the nation as either of these.

The State undertakes a varied series of duties in limitation of the working of competition. The hoary maxim of *caveat emptor* is now abandoned in view of the fact that, for want of technical knowledge, the purchaser cannot defend himself against fraud or adulteration. Even if it were contended that fools only are deceived and may properly be allowed to go to the wall, the State has still to look after its moral welfare, and, if competition is to eventuate in free swindling, such toleration of "commercial ethics" will lead to a state of society not at all preferable to that "when wild in woods the noble savage ran." To these considerations we owe a body of laws in restraint of adulteration, false representation, and numerous other forms of commercial fraud, which the best class of business men are now trying to supplement by fresh legislation against bribery and fraudulent company-promotion. One unsuspected result of this reduction of illegal gains is to make competition even more unprofitable than it is to-day, and thereby to hasten the tendency towards the fusion of rival businesses into private monopolies.

This leads us to consider the position of the different forms of voluntary association now that industry is developing into the trust stage. The destructive effects of competition have been serious enough, but the trust holds consumer and workman alike in the hollow of its hand. The trade unions have proved weak against organised capital, and only include some 1,600,000 out of 10,000,000 workers, the weakest and worst-off classes being entirely without protection. The friendly societies are staggering into insolvency under the burden of trying to save their members from old-age pauperism, and the working classes, on the testimony of Mr. Chamberlain, have no money to spare for further insurance. The co-operators, though they have abundance of funds, naturally hesitate to enter into branches of manufacture largely dependent on foreign trade, where they would have to face the rivalry of highly-skilled captains of industry, and where, even if successful, their efforts would cause the destruction of a great deal of existing capital. Yet it must not be supposed that these voluntary institutions are failures. They have been a training ground in democracy, the value of which will be seen when the working classes make up their minds to take their proper share in the government of the country, and they furnish examples of corporate enthusiasm which are the most hopeful features of this dollar-loving age. On the other hand, they have benefited exceedingly from the growth of State activity, drawing the greatest number of their members from those trades which are most effectively guarded by law. State protection has, in fact, produced liberty of action and vigour in enterprise. The same classes who fought for the free labourer and the

private trader against the trade unions and the Co-operative Stores now urge the working classes to confine themselves to the more limited forms of association and to neglect the wider forms of combined action possible through the State. But the State is the only organisation strong enough to beat down the money power of the trusts and to resist the political power which their shareholders possess and are—as in the case of the railway and water companies—not slow to exercise. Two principles of State action have been already accepted—control and expropriation. An example of the former is the Railway Commission—which regulates prices, *i.e.*, freightage rates, and fixes the hours of labour; while an instance of the latter is the measure dealing with the National Telephone Company. Action in both cases has so far been timid, but still is a precedent for stronger action. For example, to maintain the standard of life we need a minimum wage law to abolish sweating, Boards to fix a living wage on the model of those at work in Victoria, and an old-age pension scheme and an eight hours law. To protect the consumer against the working of our system of production we require a rigid control of the new private monopolies as they arise, in order that they may be taken over by the State or the municipality as soon as they have reached a sufficient degree of concentration. Finally, to ensure the highest development of the individual citizen and to secure the welfare of the nation amidst the ever keener international competition, we need a far-reaching reform in, and a detailed reorganisation of, education—the department of human activity in which unrestricted liberty and free competition have had the most disastrous effects. Voluntary association will not be rendered useless; on the contrary, past experience warrants us in expecting that a more vigorous growth of trade unionism and Co-operation will follow on State regulation. In this way, by an ever-expanding application of the principle of association, society will protect itself against the workings of competition and gradually limit its scope until at last the community really becomes one vast Co-operative State.

The Woollen Industry, Historically and Commercially Considered.

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THE art of manipulating the raw wool into yarn or threads, and of subsequently manufacturing it into woven cloth for clothing and other covering purposes, dates far back into the remote ages of antiquity. If the preparation and manufacture of cloth were considered from this ancient period alone they would form an interesting volume, for most human minds manifest an interest in all things which justly claim to have had their origin in ancient and especially prehistoric times. Ever since England began to rise in rank among the nations, the spinning of wool into yarn and the manufacture of woollen fabrics has formed the staple industry of the kingdom, and is now, at least, one of the principal trades of this great commercial country. At one period in our country's history the wealth of the nation was wrapped up in the Woollen Industry; to-day, whilst the nation is not dependent upon this industry so exclusively as heretofore, it nevertheless forms one of the most important of its commercial enterprises. A suitable introduction to the above subject must necessarily involve, at least, a brief consideration of the earliest mention of wools and manufactures, both Scriptural and historical. There can be little doubt that the manufacture of woven fabrics was practised in the early history of man. The first kind of clothing would certainly be crude and primitive, but doubtless it would satisfy the needs and circumstances of man at that time, for our first parents had few wants. They did not require much clothing—only, in fact, a short dress made of fig leaves (Genesis iii., 7). But when ejected at a

subsequent period from their genial clime they wore coats of skins (Genesis iii., 21). Later, as the original families and afterwards small and great nations extended their borders, sought out, discovered, and then migrated to more distant parts of the globe, especially to the North and West, they found the climatic conditions less favourable; consequently, other kinds of clothing became necessary, and it is most probable that at this early date spinning and weaving in its rudest form had its origin; hence we have an early example of the subsequent proverbial saying, "Necessity is the mother of invention." The art of making cloth gradually developed until it reached a state when it was fit to be employed as garments for clothing and as coverings or wrappers (Genesis ix., 23; Exodus xxii., 26). Subsequently the art of dyeing was discovered, for Joseph's coat was made of many colours. It would also appear that the ingenuity of the people had suggested the idea of combining woollen and linen in the same texture, for in Leviticus xiii., 47–48, it is recorded, "Whether it be a woollen garment or a linen garment, whether it be in the warp or woof (weft) of linen or of woollen." This art of combination has, in these later days, been carried to a high degree of perfection. The simplicity and facility with which wool could be manipulated and drawn out into a thread, as compared with linen or other vegetable material, would conduce to its more general adoption and use, hence it is very probable that for a long period the woollen manufacture was the principal one known to the ancients. From a study of the history of the ancient nations it is soon observed that those nations which had a convenient maritime situation, and thus a natural opening for the bartering of their wares, easily conceived that they could obtain a much greater profit upon exchanging their produce or manufactures with people inhabiting the country across the narrow seas (for the commerce of the ancient world was confined to the coasts of the Mediterranean and Red Seas); therefore, it was generally found that countries situated so favourably almost always made most progress in the arts and manufactures.

Before the introduction of the mariner's compass navigators did not dare to venture far out to sea, but with its invention countries fortunately having a great seaboard or an insular position received an impetus in trade and commerce, for the mariner could now undertake more distant expeditions, execute them in considerably less time, and so bring the nations closer together.

The woollen manufacture which had enriched many towns in Italy in the 12th and 13th centuries, and especially Florence, seems to have always been pervaded with the spirit of migration, particularly westward, though there must always have been a

cause which resulted in such a radical change. Accordingly, we find that France, Flanders, and England, especially Flanders (Netherlands), are all introducing and encouraging the manufacture of woollen cloth. Owing to the number of navigable rivers, the flatness of the country, and suitability for canals in the Netherlands, the inhabitants of that country extensively developed this useful and wealth-producing industry by fully utilising their natural advantages. At a later period, however, the persecution of the Flemish by Philip of Spain resulted in the exit from Flanders of the most independent in spirit and active and skilful in business. These were for the most part experts in the manufacture of cloth and the arts associated with the spinning and weaving processes, and they found a safe refuge in those countries anxious to encourage the weaving industry, Great Britain being a notable illustration; in fact, no country was in a better position to reap the immediate profit and benefit from these important changes in the state of commerce and manufacture, for at this time no other country, Spain excepted, produced a better and more plentiful supply of wool. Hence it transpired that upon the ruins of the Spanish Netherlands many of the English clothing industries were established.

The history of the English woollen manufacture, however, does not date from this period, as many writers have assumed, but it rather received an impetus with the emigration of the Flemish weavers. The first mention of English sheep and necessarily wool, according to early English records, dates from about the beginning of the 8th century. The existence of sheep in England at that time receives part confirmation by the severe measures which Edgar the Peaceful took in the middle of the 10th century to destroy their greatest enemies—wolves. At first the wool was chiefly exported, but eventually the people realised that they could use it themselves, for in the year 1100 a certain Thomas Cole is spoken of as the rich clothier of Reading, "whose wains filled with cloth crowded the highway between that town and London." Henry I. gratified Cole and his friends by making his own arm the standard measure of one yard. No sooner was wool plentiful in England and known to be valuable than it fell a victim to arbitrary power and monopoly which appears to have had its advent with commerce, for English wool until the beginning of the present century was not allowed to be exported free of duty—at first 5s. per sack was paid by the merchants, and in the days of Edward I. it had reached 40s.

Edward III., observing the great gain to the Netherlands by the export of this wool, in memory whereof the Duke of Burgundy

instituted the order of the Golden Fleece—where, indeed, the fleece was ours, the gold theirs, so vast was their emolument by the trade of clothing—resolved if possible to reduce the trade to this country, and so every protection was given to foreign manufacturers settling in England. About the same time it was enacted a felony to export wool, and it is said that the woolsacks still used in the House of Lords were originally placed there as seats to remind the Peers of the importance of the wool trade, the great staple at that time of England.

Before the close of the long and happy rule of Edward III. the textile manufacturers and trade in general had reached, compared with the circumstances of the age, a mighty growth. Then commenced that rivalry between the aristocracy and the trading classes which has continued without intermission to the present day. Previous to this wealth was the possession of few; now the genius of trade enriched thousands, conferred the dignity of rank upon merchants and manufacturers, spread the blessings of freedom and plenty, wealth, and security over the land, and raised from their slavish and dependent state the commonality to the condition of free Englishmen.

In the early part of the reign of Henry VIII. John Winchcomb, a wealthy clothier (better known as Jack of Newberry), had 100 looms and evidently 100 men to work them, for he supplied 100 men all armed and clothed at his expense and marched them in the expedition to Flodden Field against the Scots. When Edward VI. was crowned King, the growth of wool had increased and the manufacture of woollens had developed and spread itself in London and the suburbs and to various parts of the country, notably Berks, Kent, Surrey, Sussex, Essex, Suffolk, Norwich, and Halifax, the last-named place receiving especial mention by Smith in his "Memoirs of Wool." The increase in cloth manufacture appears to have extended so largely that by the reign of Queen Mary there is scarcely any necessity to export wool, for the Customs received from wool sent out of the country had diminished almost to zero. In Elizabeth's reign, as almost every schoolboy knows, there were many interesting incidents of great national importance, notwithstanding which the woollen trade did not remain at a standstill, but, on the contrary, it received its greatest impetus, with the exception of the introduction of power machinery at a later date. It was in this reign that several Flemish weavers—refugees from their native country—were encouraged to settle here in England and to follow the craft they had practised in Flanders, and which they could execute so well. The projected invasion of England by the Spanish Armada necessarily interfered with the commerce of

this country somewhat about this time, yet the trade of England at the close of the reign of Queen Elizabeth was nevertheless greater than at any previous period, though possibly not as great as some writers would have us believe, for very much has been said about this period and its advantages which many historians are liable to exaggerate when they get into the strain of description. That the clothing trade of this country was great no one can deny. The English merchant adventurers alone exported kerseys and woollen cloths to the value of £1,000,000 in the year 1601. In this reign the foreign trade of England was in the hands of three different companies, viz., "The Stillyard" (foreigners), "The Merchants of the Staple," and "The Merchant Adventurers" (English), each of which had granted to them certain privileges in trade, for which favour they paid to the Kings various sums of money. As recently as the year 1890 the arms of this ancient company of merchant adventurers could be seen in Halifax, carved over the entrance of a shop now demolished; their armorial bearings may still be seen over the entrance of Fossgate Hall, York. In the reign of Henry VIII. an Act was passed to prohibit the exportation of white undressed cloth, *i.e.*, cloth undyed and unfinished. The Dutch appear to have been more expert in this art than the English; but in Elizabeth's reign this Act was ignored, a licence being granted to the merchant adventurers. Subsequently, in the reign of James I., an alderman, whose name was Cockayne, together with several rich Londoners, obtained from the King a patent for the sole right to dye and finish all cloths. The Dutch, however, retaliated and prohibited absolutely the importation of English "dyed dress cloths," with the result that the English trade suffered, and the principal argument used by Cockayne and his friends, viz., that "the Dutch could not dispense with English cloth in whatever shape it should please the nation to send it," was proved to be worthless. There was gradually a feeling and an opinion gaining credence throughout England that English wool was superior to all other which it will be well to take note of, because, as will presently be seen, this belief was the cause of great and innumerable strifes betwixt wool growers and woollen manufacturers, or, in other words, between the landed aristocracy and the commercial men. During the existence of Alderman Cockayne's patent the price of wool fell and the exports diminished to such an extent that his patent was repealed and the previous privilege of the merchant adventurers restored. But there are always other factors which materially contribute to the prosperity of the national industries and the well-being of the nation itself. Not the least among these is that of civil and religious liberty; hence Archbishop Laud's intolerance and too rigid injunctions to

the "Act of Conformity" frightened thousands of descendants of Protestants from foreign lands, but now living in England, as well as Englishmen themselves, out of this country into other lands, and singularly enough they travelled westward as their ancestors (from the Continent) had done before, and settled principally in the New England States. Many of these forced emigrants were manufacturers or experts in the art of weaving cloth, and so it happened, as it generally does happen, persecution drove out the best and most independent spirits and all those who chose to leave their native soil and fight the battle of life in possibly less favoured climes rather than sacrifice their principles or religious beliefs. Whatever reasons may be assigned, the decline of English manufacturing was now certain, for the total annual exports in 1612 and 1613 were about 2½ millions, whilst at the end of the fifty years which followed, instead of increasing, they had fallen to about two millions annually. Then there followed an Act of Parliament to prohibit the exportation of wool, since there was an idea abroad that most foreign-made cloths were made either in part or whole from English wool. In support of this Act it was urged that there could not be any cloth made which was worth the name unless it contained at least some mixture of English wool, which at that time was much superior for the purpose than could be obtained elsewhere, but this contention in the light of subsequent events appears very much exaggerated.

In the year 1668 a man named Brewer, with about fifty walloons, was encouraged by the King to commence a manufacturing and dyeing works in England for fine woollen cloth. During the year 1669 the exports had increased to 2⅔ millions, but towards the latter part of the reign of Charles II. the woollen manufacture had again declined, and as a consequence the price of English wool depreciated, which at that time was a serious loss to England, for then wool constituted the foundation of her riches. Various artificial means were attempted to remedy this decline, the most notable being in the early part of the reign of James I., when it was enacted that all persons in England should wear woollen clothing for at least six months in the year; but the French appear to have got the most benefit from this Act, for within the short space of three years they exported to England cloths to the value of £4,000,000, which practically overstocked the English market.

In 1699 an Act was passed to reduce the duty on exported woollens, and in this year the amount of woollen exports is given at £3,000,000, the largest ever known up to this time. Again, in 1703, the exports from England almost reached £3,000,000, and during the same year England concluded a treaty with Portugal to

admit English woollens on more advantageous terms, shortly after which, in 1708, the English woollen manufacturing is found to be in a flourishing state. The average woollen export from England during the years 1718 to 1724 was nearly £3,000,000. The next increase that is noticed is from 1738 to 1743, when the average is about £3,500,000; whilst during the next ten years, 1744 to 1754, the exports rose to an average of £3,725,000 each year, which seems to imply that the woollens made for the past half century had been increasing in volume of importance and trade all along the line, though true, perhaps, not in any fixed ratio—trade seldom if ever does. It is interesting to note here that at this period it was contended that £10 worth of English wool when manufactured into cloth was in value equal to £60, *i.e.*, England reaped the benefit of £50 in labour from the efforts of her countrymen. This argument was used to further the policy of prohibiting the exportation of English and Irish wool to foreign parts.

About this time the spinning and manufacturing of woven fabrics of all kinds were slowly but surely giving birth to modifications of methods for manipulating the raw material into yarn, which were destined eventually to completely revolutionise the trade and commerce of Britain. For ages the only mode of spinning yarn was by the aid of the "distaff," which method may be described as follows: The "distaff" was a short thick stick or shaft, one end of which was held under the left arm of the spinner, whilst the other held the wool which was ready to be drawn out into a thread, both hands being at liberty to work the wool. The first few inches of the wool would probably be drawn out and twisted by the fingers only; this prepared end was then attached to a suspended spindle which was made to revolve and was usually made of wood about 15 inches in length, one end being weighted chiefly with gypsum. The spindle was employed partly to draw out the thread and to assist, by its tendency to twirl, to impart to the drawn out thread a sufficient twist as would enable the material to hold together in its attenuated form. This mode of working, or something very similar, was probably employed by the ancients for a very considerable period previous to the invention of the one-thread spinning wheel (see Plate 2), which it is supposed was first introduced into this country by a baker of the name of Jurgens in the year 1520. A similar mode of spinning was in use at and before this time in India, but this was somewhat inferior to that of the European method.

At the time to which we now refer the one-wheel spinning method does not appear to have met with universal favour or

come to the knowledge of all, for Dyer, an English poet, who wrote "The Fleece" in the year 1757, says:—

> And many yet adhere
> To the ancient distaff at the bosom fixed,
> Casting the whirling spindle as they walk;
> At home, or in the sheepfold, or the mart,
> Alike the work proceeds.

The system of weaving was still performed upon the old treadle loom (see Plate 4), power-loom weaving not having yet been introduced into practice. Primitive as were the methods of the weaver, he was always waiting for yarn from the spinner. This difficulty was increased when, in 1738, John Kay, a native of Bury, in Lancashire, introduced what was then called the "fly shuttle." He was residing among the woollen weavers at Colchester when he first conceived the idea, and by the application of his discovery they were enabled to produce double the amount of cloth than heretofore. The method adopted prior to Kay's invention was to wind the weft on a stick or lath which was grooved at the end so as to hold a sufficient length of yarn, the stick containing the weft being continually passed through the opening in the warp by hand, similar to the principle illustrated at Plate 3. By adding an extra length to each side of the going part (that portion which is employed to beat up the weft into the cloth) and adopting a suitable shuttle to fit the size of the opening and the dimensions of the boxes at opposite sides of the loom the shuttle was made to travel rapidly, or "fly," through the opening in the warp, technically called "shed," being received and remaining stationary in the shuttle box at the opposite end of the loom ready for the next pick. This simple picking invention enabled one weaver to weave greater widths of cloth than hitherto. Some broadcloths which had previously required two men to produce them could now be made by one person. I have seen the old method of picking in use, and it is still employed and preferred in the manufacture of chenille rugs which are woven by hand, even though power is used in the same room.

The invention of John Kay only aggravated the difficulty of the weaver to obtain a sufficient supply of weft from the spinners. The inventor was, however, so threatened with persecution by workmen who feared that they would lose their employment that he fled to Paris for safety, and thus experienced the first of what subsequently transpired to be the beginning of a series of persecutions against inventors and their discoveries. Though Kay took his invention to his native town, Bury, it was not much used in the cotton trade until the year 1760, during which year his son,

Robert Kay, so improved the original mechanism that the weaver could weave any colour of two or more shades at will. This motion he called the "drop-box," which principle is employed to-day not only in the manufacture of fancy woollens, but in most fancy woven fabrics. Thus it will be understood that the one-thread wheel, though an improvement upon the ancient distaff, was totally inadequate to meet the demand created by the improved methods in weaving. The mode of spinning on this single-thread wheel is not difficult to understand; there were only two operations after the material had been prepared by the hand carder, whose object was and always has been to thoroughly open and disentangle the close and matted locks of wool. The fundamental principle in the "carding" consists in completely separating and disarranging the natural order of the wool fibres and in rearranging them artificially. The methods adopted to accomplish this object have been very numerous, but our present purpose will be best served by a brief description of the hand cards (see Plate 1). The old hand cards were made of wood, and were usually about one foot long by five inches broad, having a handle about the middle, and were covered with card clothing, the clothing being usually made of thin leather, through which were fixed a considerable number of small wires of equal length and about half an inch long. These wires were bent at a point about midway from the leather foundation, so as to give them a certain amount of spring or elasticity, and their points were ground to a shape which enabled them to either "card" the wool, *i.e.*, pierce it and work it, or strip it from off the card. The simple process consisted in holding one of the cards stationary, say, upon the knee of the person using it, and then filling it with as much wool as could be conveniently worked. The wire points of the other card were now brought into contact with those containing the wool, but held so that the points were opposed in direction to those which were stationary, and the operation was continued until the carder thought that he had sufficiently opened and thoroughly mixed the different lengths of wool fibres, after which the two cards were held in a vertical position, and by a gentle and peculiar working of them, with the wire teeth all pointing in the same direction, the carded wool was made into a roll equal to the length of each card, which was now ready for the spinning wheel. (A photograph of two hand cards, together with a roll of prepared wool, is shown in Plate 1.) The two operations already referred to in regard to the spinning were roving and spinning. First, the rolls of carded wool were separately applied to the spindle, which was made to revolve by the spinner turning the wheel with the right hand, whilst with the left she held and gradually attenuated the roll of carded wool into thick threads,

which were subsequently wound on the spindle and made into "cops," to be afterwards drawn out into a finer thread by a repetition of the above process. By means of the spindle revolving, and one end of the material being held in the spinner's hand, twist was put in at each operation of attenuating the material. Though this method was capable of producing six or seven times the amount of yarn that could be spun by the aid of the distaff, it was, as already shown, incapable of meeting the demands of the weavers. Curiously enough, the time was not now far distant when these two factors should be reversed.

Inventive genius was already contriving a method of spinning by rollers, whereby a considerable number of threads could be made at the same time with a machine which required but one pair of hands to work it. John Wyatt, of Birmingham, appears to have first conceived the idea of this system of spinning about the year 1730, and afterwards, in 1733, he made a model by which he says he spun the first thread ever produced without human fingers. In 1738 Lewis Paul, a foreigner, who became the financial partner of John Wyatt, procured a patent "To make use of and exercise a new invented machine for the spinning of wool and cotton in a manner entirely new," &c. Though Wyatt and Paul used these machines in a spinning mill at Northampton with varying degrees of success, it was left for Richard Arkwright, a poor barber of Preston, to reap the greatest advantage from the invention. By dint of perseverance and inventive ingenuity Arkwright produced, perfected, and patented a machine in 1769 which, though first used for the spinning of cotton, was afterwards adapted and employed in the woollen trade, and eventually enabled England to supply almost the whole world with the nation's staple industry. Arkwright's ultimate personal reward was fame, position, wealth, and a knighthood. Though he never admitted in the great trials which took place in the year 1785 that he had ever seen the productions of the previous inventors, Wyatt and Paul, yet it is quite probable he had seen a model of Wyatt's, and it is certain that spinning by rollers had been accomplished many years before Arkwright took out his patent, as is proved by Paul's patent previously referred to and also by the following few lines written by Dyer in his poem "The Fleece," published in 1757, which evidently has reference to Paul's machine:—

> But patient art,
> That on experience works from hour to hour,
> Sagacious, has a spiral engine form'd,
> Which on an hundred spoles, an hundred threads,
> With one huge wheel, by lapse of water, twines,
> Few hands requiring; easy tended work,
> That copiously supplies the greedy loom.

Though Arkwright is not entitled to all the merit which some writers have claimed for him, he possessed very high inventive talent, as well as much sagacity, which is evidenced by his faculty of estimating the true value of the mechanical inventions of others and of combining and perfecting them and so turning them to practical advantage. In his specification of the patent he obtained on July 15, 1769, he recites that he had "by great study and long application invented a new piece of machinery never before found out, practised, or used, for the making of weft or yarn from cotton, flax, or wool, which would be of great utility to a great many manufacturers, by making the said weft or yarn much superior in quality to any heretofore manufactured."

There is yet another spinning invention that will always stand out as a great historical event, and which is always deserving of note in any descriptive history of the development of mechanisms for making yarns and manufacturing cloths. The machine referred to is known as Hargreaves's Spinning Jenny, which was capable of spinning "roving" into yarn. Hargreaves contrived a frame in one part of which he placed eight rovings in a vertical row; similarly, in another part he had a row of eight spindles. The rovings were extended to the spindles and passed between two horizonal bars of wood, which could easily be adjusted to nip and hold the roving threads between them. With the left hand the horizontal bars of wood could be drawn along the horizontal frame for a suitable distance from the spindles, thus attenuating the roving threads; simultaneously the right hand turned a wheel which made all the spindles revolve rapidly, and so the fibres were made to twist round each other during the time of the attenuation of the rovings, by which means the requisite fineness of yarn could be obtained. After each drawing-out the yarn was wound upon the spindle and the process was repeated. This method differs so completely from either Wyatt's or Arkwright's that there is no doubt about it being a perfectly original invention, and undoubtedly, too, this last invention is the root idea of the modern mule spinning frame, which to-day is probably the most wonderful machine in the whole range of textile mechanics.

Crompton, the inventor of the mule, learnt to spin on Hargreaves's Jenny. Hargreaves was an illiterate man and of humble circumstances, being a weaver at a small village named Standhill, near Blackburn. At first he only spun weft for the use of his own household. Though he must have been conscious of the great value of his machine as an invention, he did not attempt to patent it at first. But his wonderful and productive discovery could not long remain a secret, and it soon became rumoured abroad that he

had this mechanism in his house, but, instead of receiving credit and encouragement for his wonderful invention, a crowd broke into his dwelling and destroyed his "Jenny," besides which he suffered much persecution at the hands of his competitors and the villagers. Eventually he was obliged to flee from his native county and take up his abode in Nottingham. As already stated, his machine was originally made with eight spindles, but when he subsequently took out a patent in 1770 it contained sixteen spindles, and these were afterwards increased to 120.

Hargreaves, like Wyatt, Paul, and Arkwright, only experienced the persecution of the mob which was characteristic of the period. Mankind has generally been slow to acknowledge and reward the merits of inventions. When inventors have failed in their projects they have sometimes been pitied; when they have succeeded they have frequently been subjected to persecution, envy, and hatred, in addition to having to stand by and behold that which has cost them a life of unremitting energy and increasing toil being besieged and destroyed by an infuriated crowd just at the moment when success seemed certain. Sometimes comparatively insignificant defects have been seen and seized by other inventors, who have improved and placed them upon the market in a more perfect and practical condition, for which simple improvement they have received the bulk of the rewards. An invention is frequently only brought to perfection by various contributions from experimentalists, and then it becomes very difficult to determine the respective portions to each author, and frequently the original inventor becomes bankrupt in consequence of the long development of his original plan.

The preparation of the roving—that is, of the material previous to the spinning process—was still very imperfect, but the hand system of carding was gradually being supplanted by improvements in mechanical carding.

Without discussing the immediate modification of hand carding we will only notice the radical change in the system of carding which received its finality of idea in the "rotary system," and which, therefore, embodies the principle in use to-day, all subsequent improvements having been only modifications of details; the fundamental principles still remain intact. The first patent in the rotary system of carding wool or cotton is traceable to Lewis Paul, referred to previously, and is of the date 1748, but it did not become generally known nor applied until the sixties and seventies of the same century. Most of the improvements in preparing the roving by carding and the yarn by spinning were first more generally adapted for the preparing and spinning of cotton, hence

we note that the woollen manufacture, which for generations past had been the staple industry of England, was silently but surely being outstripped in the commercial struggle for supremacy. Eventually, however, the carding and spinning operations were generally introduced and adopted by the woollen manufacturers of England. Benjamin Gott, a woollen manufacturer, of Leeds, is variously reported to have been the first to apply these machines successfully. His firm adopted them on a much larger scale than any had done heretofore, Lewis Paul included. Meanwhile the volume of manufactures from wool was considerable, but fluctuating, as will be seen from the summary below, gleaned from the inspectors' reports of that period. These inspectors were appointed in the year 1765 to inspect, measure, and mark all cloths when they left the fulling mill, and to keep a proper register of the same. By an order of the House of Commons in 1777 an account was made from their books of the woollen goods of all sorts which were exported in the years 1772 to 1776, inclusive, and is as follows:—

In the year	1772.....4·5	millions	were exported.
„	1773.....3·87	„	„
„	1774.....4·33	„	„
„	1775.....4·22	„	„
„	1776.....3·86	„	„

At the time of the American War in 1775 an interesting incident happened which revealed the superiority of English manufactured woollens as compared with the French, Dutch, and others. France lent a sum of money to the American Congress for the purpose of clothing the troops of the latter. France naturally expected to receive the orders for the manufacture of the army clothing, but Mr. Lawrence, the American official appointed to order the clothing, went to Holland and purchased English cloths and forwarded them to his country. The French remonstrated, but Mr. Lawrence justified his conduct by saying that it was his duty to do the best he could with the money at his disposal, and that "the English cloths of the same price were, in his estimation, much better than the French." In the manufacture of coarse cloths, however, a German, as recorded in Woolrich's correspondence, states that he could sell at 20 per cent less than they could purchase the English cloth of similar make, but he admits that the finer sorts of English makes were superior to those of his own country.

It will be found of general interest at this stage to note the average cost of cleansing wool, spinning yarn, and weaving white broad woollen cloth, the same being an extract from the particulars prepared by John Wood, of Leeds (White Cloth Hall), and

presented to a Select Committee of Inquiry at which the manufacturers of England showed just cause why an extra import duty should not be put upon German and foreign linens in favour of Scotch and Irish linens, the English woollen manufacturers being afraid the Germans would retaliate, which they threatened to do if the duty upon linen was passed.

In 1774,	6lbs. of spinning warp.....	cost	2s. 6d.
,,	6lbs. ,, ,, weft	,,	1s. 2d.
,,	weaving one string (10 feet) ...	,,	8d.
,,	cleansing one stone of wool ...	,,	6d.

In 1769 these prices had been respectively 2s. 10d., 1s. 4d., 10d., and 9d.

Similar tables of statistics were forwarded from different parts of the woollen centres of England, which showed there would be considerable difficulty in retaining the foreign markets if the proposed import duty on linen goods was carried. Eventually the proposal was defeated in the House of Commons by 129 votes to 63, with the further result that the Germans made concessions of considerable advantage to English woollen manufacturers. The manufacture of fine woollens, *i.e.*, the cloth now known and occasionally referred to as the old superfine cloths, was gradually developing, while the coarser woollen manufactures were depressed and decreasing. A curious proposition emanated from Gloucester, the author of which was the Dean, then Dean Tucker. He said: "The common and middle classes of this country being for the most part above wearing our own coarse woollens and worsteds, we must endeavour to raise up such a generation of men, women, and children as shall be obliged by their station in life to be clad in such garments as are made out of coarse wools, and to use such sorts of goods for their bedding and furniture." The suggestion is so retrograde in its tendency as to require no comment except, perhaps, that the Dean ought to have been made to wear and use the same himself. The development in the fine woollen trade caused the manufacturers to use more of the fine Spanish merino and short clothing wool generally; hence the short clothing wool began to gradually rise, while the long coarse and also combing wool depreciated in value, so much so that English wool growers, especially of the coarser and longer sorts, accumulated large unsaleable stocks. They, therefore, began in 1781 to agitate for a repeal of the law which then prohibited the exportation of English wool, and which they asserted was accountable for the low price of the same. As a consequence much excitement was manifested among both the wool growers and the manufacturers. Accordingly the merchants and manufacturers of England, and

especially of Yorkshire, held a special meeting at the Moot Hall, Leeds, to discuss ways and means to be employed in defeating the efforts of the wool growers. It was contended that one pack of English wool would enable the manufacturers of France and Flanders to work up eight to ten packs of their own by mixing the two kinds, and thus rival this country in cheapness and quality. On the contrary, the English wool grower could obtain much higher prices from the foreigner, and in consequence of the depressed state of home manufactures it was most desirable, from his point of view, to export the English wool. The agitation increased and the excitement became intense, and numerous meetings of both parties were held throughout the country. Sir John Dalrymple ably put the points for the wool grower when he said, "It is to the advantage of a State to work up its own material . . . but if from any cause of peace or war it fails to consume the supply, then it is to the advantage of the State to export it if a market can be found." English wool had within two or three years, 1778–1781, fallen from 15s. to 9s. per 28lbs. One correspondent of the Wool Growers' Association admitted and described the woollen manufacturing as "That ancient, that fundamental support of Great Britain." Very many letters were written, pamphlets issued, speeches delivered, and much evidence given on both sides, but, judging from several copies of the correspondence I have read, the wool growers appear to have had the best of the argument, for no manufacture can be really beneficial to a State which stands in need of a monopoly of the produce of the country. An extract from a speech made by Lord Cooke as far back as 1621 is very appropriate for this period—or any other, in fact:—"Freedom of trade is the life of trade, and monopolies and restrictions on trade do overthrow trade." Nevertheless, the influence of the manufacturers and the case they presented evidently convinced Parliament that to allow the exportation of English wool would be more detrimental to the woollen manufacturers of England than it would be advantageous to the farmers to export it. Consequently, there was great rejoicing among the woollen manufacturers, especially at Leeds, where the parish bells were set ringing when it became known that the measure prohibiting the exportation of wool was confirmed.

But there were other factors which accounted very largely for the decrease in the price of English wool, the chief being the increase of sheep in England without a corresponding increase in demand. Gregory King, an authority on sheep, said that in 1698 there were 12,000,000 sheep shorn in England; the *Gentleman's Magazine* for the year 1741 gives the number as 16,000,000; whilst Arthur Young, a writer on sheep and wool, computes that there

were 25,500,000 sheep in England in the year 1782. Further, the importation of fine Spanish wool was on the increase, the average being:—

	Lbs.
1779 to 1782 inclusive.....	1,578,085
1783 to 1784 „	2,116,183
1785 to 1787 „	2,966,389

Consequently, it is no surprise to find the English agriculturists turning their attention to Spanish merinoes. King George III. took the initiative himself, and imported a few merino sheep from Spain in the year 1786; later, in the year 1792, he added a few more, and during this period the English farmers were indefatigable in their endeavour to improve the English fleece and sheep, but they never succeeded in supplanting the Spanish wool by home-grown—the soil and climate is not suitable. In 1790 the import of Spanish wool into this country was about 4,000,000lbs., and in 1840 it amounted to over 50,000,000 lbs.; but merino sheep having been introduced into the Colonies, and finding there a suitable soil and climate, especially in Australia, we now derive our largest supply of wool from that country.

				Lbs.
In the year 1810 we imported from that colony ...				167
„ 1850	„	„	„ ...	39,000,000
„ 1898	„	„	„ ...	690,000,000

The volume of trade in woollens does not appear during the last decade of the eighteenth century to have made very definite progress, though in the year 1799 the exports of all kinds of woollen goods exceeded 6,000,000, the official returns for the previous nine years being:—

Year.	Millions.	Year.	Millions.	Year.	Millions.
1790	5·2	1793	3·8	1796	6·0
1791	5·5	1794	4·4	1797	4·9
1792	5·5	1795	5·2	1798	6·5

The invention of weaving by power was not, however, applied generally to the manufacture of woollens on a large scale until far into the present century; nevertheless, it would be inappropriate to omit a reference to the introduction of weaving by power, and, since all manufactured woven fabrics have a common origin, it is difficult to discourse on one without a reference to the others, for it should be noted that power-loom weaving was first applied successfully to the weaving of cotton by Dr. Edmund Cartwright, of Doncaster, formerly of Kent. Previous attempts had been made

with varying degrees of success and failure, especially the latter, by De Gennes, a French naval officer, as well as by Vaucanson, also a Frenchman, and others. But when, by the introduction of Arkwright's spinning machinery, the cotton spinners were able to more than supply the requirements of the weaving branch, it became manifest that some advancement must be made to increase the production of woven fabrics. There is also ample evidence to prove that this kind of reasoning induced Dr. Cartwright to make his first attempt to weave by power, the circumstances connected therewith being best recorded in his own words and from a letter he wrote to a Mr. Bannatyne, which ran as follows:—

Happening to be at Matlock in the summer of 1784, I fell in company with some gentlemen of Manchester, when the conversation turned on Arkwright's spinning machinery. One of the company observed that as soon as Arkwright's patent expired so many mills would be erected and so much cotton spun that hands never could be found to weave it. To this observation I replied that Arkwright must then set his wits to work to invent a weaving mill. This brought on a conversation on the subject, in which the Manchester gentlemen unanimously agreed that the thing was impracticable; and, in defence of their opinion, they adduced arguments which I certainly was incompetent to answer, or even to comprehend, being totally ignorant of the subject, having never at that time seen a person weave. I controverted, however, the impracticability of the thing by remarking that there had lately been exhibited in London an automaton figure which played at chess. "Now, you will not assert, gentlemen," said I, "that it is more difficult to construct a machine that shall weave than one which shall make all the variety of moves required in that complicated game." Some little time afterwards, a particular circumstance recalling this conversation to my mind, it struck me that, as in plain weaving, according to the conception I then had of the business, there could only be three movements, which were to follow each other in succession, there would be little difficulty in producing and repeating them. Full of these ideas, I immediately employed a carpenter and smith to carry them into effect. As soon as the machine was finished I got a weaver to put in the warp, which was of such materials as sailcloth is usually made of. To my great delight a piece of cloth, such as it was, was the produce. As I had never before turned my thoughts to anything mechanical either in theory or practice, nor had ever seen a loom at work or knew anything of its construction, you will readily suppose that my first loom was a most rude piece of machinery. The warp was placed perpendicularly, the reed fell with the weight of at least half a hundredweight, and the springs which threw the shuttle were strong enough to have thrown a Congreve rocket. In short, it required the strength of two powerful men to work the machine at a slow rate and only for a short time. Conceiving, in my great simplicity, that I had accomplished all that was required, I then secured what I thought a most valuable patent, 4th of April, 1785. This being done, I then condescended to see how other people wove; and you will guess my astonishment when I compared their easy modes of operation with mine. Availing myself, however, of what I then saw, I made a loom in its general principles nearly as they are now made. But it was not till the year 1787 that I completed my invention, when I took out my last weaving patent, August 1st of that year.

The only necessary movements which Dr. Cartwright originally conceived to be requisite for the purpose of weaving were (1) A

separation of the warp threads—"shedding;" (2) The throwing of the shuttle through this opening—"picking;" and (3) "Beating up the weft," *i.e.*, bringing the inserted weft close up to the cloth already woven. But two other movements must be added to satisfy the essential and first principles of automatic weaving, viz., "taking up" the cloth, *i.e.*, regularly winding it on to a beam or roller, and "letting off" the warp in proportion to the amount of cloth taken up; all other improvements and additions are secondary, for in order to weave by power there were many things necessary to be overcome which do not and could not enter into hand-loom weaving. To recite all these difficulties and attempts to overcome them would require much time and more space than I have at disposal, hence the following examples must suffice. The hand-loom weaver could stay his hand whenever the weft broke or was finished and required renewing, whereas in power-loom weaving the loom would go on repeating its motions without doing any real work, but, on the contrary, much damage, unless some automatic motion were applied to stop it when necessity required; also it was soon evident that "temples" must be applied to the loom which would hold the cloth at the proper tension and width without having to be moved, as was the case in the hand-loom. These, with the automatic winding up of the cloth and letting off of the warp threads, appear very simple to us at the present day, but it took up the greater part of a century to successfully solve these problems. We may now leave these men of genius and inventors of all kinds to prosecute their researches and perfect their contrivances whilst we consider another phase of our subject.

In the year 1800 a Bill was introduced into Parliament for the Union of the Kingdoms of Great Britain and Ireland. There was a clause in the Bill which somewhat alarmed the woollen manufacturers of Great Britain. It stated—

> That from the first of January, 1801, all prohibitions and bounties on the export of articles the growth, produce, or manufacture of either country to the other shall cease and determine, and that the said articles shall thenceforth be exported from one to the other without duty or bounty on such exports.

Against this section of the proposal the cloth merchants, manufacturers, and others interested in the woollen trade presented a petition to Parliament praying that the above clause might be deleted. The following is a part of the petition and sufficiently illustrates the point at issue:—

> That your petitioners humbly conceive and believe that the growth of wool in Great Britain is not sufficient to supply the manufacturers thereof with a quantity equal to the present demand for home consumption and foreign markets, so that if any part be suffered to be taken away your petitioners and

the manufacturers must experience very great injury . . . in case British wool should be permitted to be exported, that, under pretence of carrying it to Ireland, great quantities would be conveyed to foreign countries without the possibility of prevention, especially in times of peace.

An amendment for deleting that part of the measure which applied to the free exportation of English wool to Ireland was lost by 133 votes to 53, and the clause consequently passed as part of the original Bill, so that indirectly the wool growers of England obtained the advantage.

But, meanwhile, there were other factors as work which, viewed from our present point of vantage ground, were calculated to injure the English wool growers. Formerly the wool obtained from the sheep of England was shorter and finer and, therefore, better adapted to the manufacture of woollen than worsted yarn, for this latter, owing to the combing then being done by hand, required a staple of about six inches in length. When the land enclosures which took place, together with the improved methods of husbandry, caused a considerable alteration in the character of the sheep, their carcases and fleeces becoming heavier in many parts of England, then the wool gradually partook more of the nature of the long-wool sheep, so that the agriculturists were in a less favourable position to supply the increasing demand for fine wool. In vain they endeavoured to produce a quality of wool that would satisfy the makers of superfine cloth, and it is no wonder they were discouraged after the strenuous efforts they put forth; anyhow, they failed to obtain the same price for their merino wool as was paid for the Spanish and Saxony, but this they attributed to the prejudice of the manufacturers rather than to an inferior quality of their produce. As a remedy they agitated for the imposition of a tax on imported foreign wool, but this was met by determined and combined opposition from those interested in manufacture and exchange, and finally a Select Committee of the House of Commons (1816) decided in favour of the latter party. But out of the foregoing the vexed question of direct exportation of English wool once more came to the front. All the advocates in favour of non-exportation of wool laid stress upon the importance and wealth-producing process of manufacturing; for in the manufacture, they said, the raw wool became worth several times its original value, and that when made into cloth it was only another form of exporting the wool from which the nation ultimately reaped the benefit. But Lord Milton, who was at the head of the wool growers, wisely retorted, "When the manufacturer refuses to buy, what is the grower to do?" Evidently there was only one thing possible: either he must export his wool or else turn his attention to the production of other articles of produce.

This proposition of the agriculturists, with a subsequent attempt in April, 1818, to impose a tax upon imported foreign wool, was on each occasion defeated. These persistent and determined efforts of the landed aristocracy to obtain protective duties on imported wool, to which might be added corn, constantly kept them and the manufacturers antagonistic in principles of political economy, for the latter class maintained that the high price of corn, &c., increased their expenses and so kept up the price of the goods they made.

In 1819 it appears that the Government desired to raise £1,400,000, which they proposed to do by a tax on malt, but the landowners and agriculturists refused to allow this Bill to pass unless a tax should also be placed on imported wool. Accordingly they carried their point, and a tax of 6d. per lb. was levied in the House of Commons on June 18th, 1819, by a majority of 113. Immediately the woollen manufacturers throughout the country organised themselves and endeavoured to obtain a repeal of this measure, but their efforts at first seemed fruitless; in 1820 they reduced the above majority of 113 to 74, and still persisted in their efforts towards a repeal. It is interesting to note that it was as a result of these dogged, persevering, and combined efforts for a positive change in the laws relating to wool and woollens that the term "Radicals" originated. The official exportation of woollen goods after the imposition of the import duty showed a gradual decline, and the manufacturers contended that the tax on wool was limiting their exports. The fight was long and fierce, but ultimately the Government of Lord Liverpool was prepared to repeal the import duty on wool provided that no opposition to the free exportation of English wool was forthcoming. However, this affected the worsted more than the woollen trade, and the proposition met with much opposition from that branch of the industry. On May 22nd, 1824, the import duty on wool was reduced from 6d. to 1d. per lb., whilst free exportation was admitted. Immediately afterwards the Right Hon. William Huskisson, President of the Board of Trade, evidently a person who interested himself in the commercial affairs of his country, began to see that the woollen manufacture, which, he said, was "the oldest industry in the country," should be liberated from all restrictions and left unfettered to make true progress in the world. No fewer than 100 statutes had been repealed within his memory, and he now proposed to reduce the duty on imported woollen cloths from 50 per cent to 15 per cent, and to give the manufacturers an equivalent by reducing the duty on several imported wares used in the processes of manipulating, making, dyeing, and finishing woollen cloths. This arrangement met with little

hostility, and thus the manufacturers were placed on a much sounder footing than hitherto. Other fruitless attempts were made by the agriculturists to reimpose an import duty on raw wool, but little by little the restrictions on wool and woollen manufactures were redressed until finally they were all removed, perhaps for ever, by the adoption of the Free Trade policy of Cobden and Bright, which was applied to every department of British commerce, and from then until the present time the maxim of the league, to "Buy in the cheapest market and sell in the dearest," has been accepted as the law of our commercial policy.

Meanwhile the advent of machinery, its improvement and perfecting, had been making much progress. The woollen and all manufactures increased, and the manufacturers profited by the discoveries of Watt, Arkwright, Cartwright, and others, and according to Green, in his "History of the English People," at this time—

> The increase of wealth was indeed enormous. . . . Wheat rose to famine prices, and the value of the land rose in proportion with the price of wheat. Enclosures went on with prodigious rapidity; the income of every landowner was doubled, while the farmers were able to introduce improvements into the processes of agriculture which changed the whole face of the country. But if the increase of wealth was enormous, its distribution was partial. . . . Even manufactures, though destined in the long run to benefit the labouring classes, seemed at first rather to depress them.

The days of the supremacy of the domestic manufacturer were now numbered; hitherto, the manufacture of cloth in England had been distributed very extensively throughout the country and was carried on by persons who made the goods in their own households or shops, employing, in some instances, besides the members of their own families, a few other villagers. In addition there were two classes of merchants—those who simply bought "pieces" from the domestic manufacturer and the merchant manufacturer who used his capital in engaging other persons to make his goods. The manufacturer then attended the "Cloth Halls" to dispose of his goods, which were usually carried by "pack horses" to and from the wool and cloth fairs.

At one time there was scarcely a county in Great Britain or Ireland where the manufacture of cloth was not carried on and flourished; now there are many places where it has ceased to exist and where it is almost unknown. But it has always been the rule of commerce, and probably ever will be, that ancient and diffused methods must yield to the more scientific and utilitarian modes of operation. After the introduction and improvements in machinery more collective capital was found to be necessary, for large mills sprang up, many of which were financed by two, three, or more

capitalists. The domestic and small manufacturers, together with a large proportion of the rural population, consequently migrated towards the centres where these mills were built and settled down around them in great masses. These centres were chosen by the manufacturer according to the advantage they presented for his work as regards access and condition of roads, rivers, or canals, together with cheapness of carriage to and from the cloth markets.

With the exportation of merino sheep from Spain and England to the Cape, Australia, and other British colonies, as well as to foreign countries, and also of some of the English varieties, chiefly Lincoln, for crosses with the merino, we may safely state that the raw wool of to-day is the product of all countries more or less, and singularly enough no animal adapts itself so readily to the various countries and climes as does the sheep.

Consequently, there are now great diversities and varieties of breeds of sheep, which necessarily produce innumerable qualities of wool, and which it would be impossible to define here. Generally speaking they may be classed under two heads—long woolled and short woolled sheep—all others being considered varieties of these two and obtained by crossing, climate, and pasture. The illustration in Plate 5 shows a few typical varieties.

There have been innumerable and many interesting controversies about long and short sheep. In the autobiography of James Hogg a good tale is told about Sir Walter Scott, at a time when this question was much to the fore, and when he had heard so much about it that it had become a bore. Sir Walter, "putting on his most serious calculating face, turned to Mr. Walter Bryden and said, 'I am rather at a loss regarding the merits of this very important question. How long must a sheep actually measure to come under the denomination of long sheep?' Mr. Bryden, who, in the simplicity of his heart, neither felt the quiz nor the reproof, fell to answer with great sincerity. 'It's the woo', sir; it's the woo' that makes the difference; the lang sheep hae the short woo' and the short sheep hae the lang thing, and these are just kind of names we gie them, like.' Mr. Scott could not preserve his countenance of strict calculation; it went gradually away, and a hearty horse laugh followed."

Of the long wools Lincoln, Leicester, Alpaca, and Mohair are typical examples, while among the shortest are the Southdown (Sussex), the Australian, Cape, German, and American merinoes and Buenos Ayres. But there are also many varieties of wool in the same fleece; the finer and shorter is found

on the forepart of the sheep, but it gradually gets longer and coarser as it descends to the under parts of the belly and towards the flanks. A single fleece is capable of yielding a dozen or more different sorts, and to divide the fleece into seven or eight different sorts was no uncommon thing, but now very often only three are made.

In previous years the "wool staplers" purchased the wool from the farmers of England as well as abroad, and then sorted it into its various qualities or lengths and fineness of staple, retailing it to the domestic and small manufacturers according to their respective wants and the kinds of fabrics they made.

Our present supply of wool, in addition to the English sorts, is largely obtained from the colonies, but foreign wool is also imported. When the colonial sheep are shorn the fleece is made into two or three sorts and packed in separate bales, in addition to which the cross breds are also packed in different lots, which require little or no sorting when received by the manufacturer. The wool is then shipped to the wool markets, of which London is the chief, although important wool sales are also conducted at Liverpool and Antwerp. London is chiefly concerned with the colonial wools from the Cape, Australia, and New Zealand. Liverpool takes chiefly the East Indian and Asiatic, such as Persian, Cashmere, and China wools. The South American wools, such as Buenos Ayres and River Plate, are mostly dealt with on the Continent at Antwerp. In London six series of sales are held during each year, viz., in January, March, May, July, September, and November. The date, duration, and order of selling are settled by the wool brokers. The list of acceptances is usually closed about eight days before the sales of each respective month. The wools for each day's sale are on view from 8 a.m. till 4 p.m. They are sometimes stored at the warehouses, but chiefly at the docks. Every bale of wool is shown, and they are tiered in long rows, three bales high, with an aisle between them six feet wide. In every aisle is a table on which may be placed any samples that the buyer may draw from the bales for examination. The canvas is cut at the corners of each bale, and buyers can cut open and pull the wool out of as many bales as they wish. Every bale bears a ticket showing the lot number, clip mark, and number of the bale. The wools are very carefully graded, the different qualities, also the "ewes" and "wethers," the "combing" and "clothing," being packed separately. The wools are carefully skirted, *i.e.*, the short wool growing round the necks, legs, and belly of the sheep being taken off and packed in separate bales. The sales commence at

four o'clock. All prices are net cash for purchases within fourteen days after date of invoice, which day is known as "prompt day." Each buyer has also to pay to the broker as "lot money" 1s. for each lot of wool purchased. Most spinners and manufacturers commission wool brokers to make their purchases, the rate of commission charged being ¼ per cent, in addition to ¼ per cent brokerage.

Lots of one, two, and three bales are termed "star lots," and are usually left until the end of the day's sale; a buyer having purchased a lot has the option of taking the next and succeeding lots unless his price be exceeded or he declares. The various lots on offer are usually designated, first, by the country or part where the wool has come from, *e.g.*, Buenos Ayres and Saxony, or the port from which it was shipped, *e.g.*, Port Philip, Adelaide, and Sydney; second, by a special mark, which may be of letters or other form or a combination of both, *e.g.*:—

"TRAWALLA," "WWW," &c.

These names and marks enable buyers to identify the exporters of the wool and assist them to estimate its value as they look through the bales at the warehouses. In the case of bales bearing well-known marks, the buyer can rely upon the wool being of the same quality throughout.

The extent of British trade in imported wool during the last five years may be seen from the following official particulars, but, since very large quantities of foreign and colonial wool are purchased at the London wool sales for re-exportation to various manufacturing countries throughout the world, the amount re-exported is also given herewith, together with the total left for home consumption.

IMPORTS OF SHEEP AND LAMBS' WOOL ONLY.*

	1894.	1895.	1896.	1897.	1898.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Colonial	619,176,074	660,046,377	616,895,464	613,145,259	579,309,422
Foreign	81,374,188	110,908,826	96,679,709	122,482,161	110,136,717
Total	700,550,262	770,955,203	713,575,173	735,627,420	689,446,139
Re-exported....	344,949,461	404,187,913	334,403,903	370,841,212	282,799,721
Left for home consumption..	355,600,801	366,767,290	379,171,270	364,786,208	406,646,418

* Alpaca, llama, vicuna, mohair, and goat wool not included.

VALUE OF IMPORTS.

	1894.	1895.	1896.	1897.	1898.
	£	£	£	£	£
Colonial	22,055,240	22,267,141	21,550,608	20,423,048	19,896,934
Foreign	2,735,921	3,758,819	3,407,738	4,013,823	3,540,254
Total	24,791,161	26,025,960	24,958,346	24,436,871	23,437,188
Re-exported....	13,475,048	15,137,236	12,236,339	13,322,323	10,068,708
Left for home consumption..	11,316,113	10,888,724	12,722,007	11,114,548	13,368,480

When the raw wool reaches the spinner it is subjected to the various processes necessary to make it into yarn, which are as follows: Sorting (when necessary), scouring, drying, teasing or willowing, blending, oiling, carding, condensing, and spinning. The object of scouring is to cleanse the wool from all its natural impurities, such as sand, dirt, and grease, after which it is dried. If the wool has to be dyed it is generally performed at this juncture.

The next operation is teasing or wilowing. The original word was probably "winnowing," since this is most akin to the operation which is performed, viz., that of first opening the wool and then, by means of a fan connected with the machine, blowing out the dust, dirt, and loose dye-wares. The wool is now ready for the blending process. If an all-wool fabric has to be produced, whether superfine or fancy, then different qualities of pure wool are mixed to suit the fashion and type of cloth required; if a mixture fabric is required, then two or more different coloured wools are blended in suitable proportions. This is one of the stages where there is much opportunity afforded for exercising originality of idea in the various schemes of combination and so producing what Dame Fashion is always demanding—novelty, and in some cases cheapness, for it is in the blending that the various wool substitutes, such as shoddy, mungo, extracts, flocks, and noils, also cotton and sometimes silk waste, are combined and subsequently made into the so-called woollens, and which in commercial circles are classed as part of the woollen trade.

Mungo is obtained from hard-milled cloths, and is of two kinds, new and old, the former being tailors' clippings and merchants' "tabs," while the latter is obtained from worn-out garments, both of which when placed into a rag grinding machine are literally torn thread from thread and fibre from fibre. During the process the

fibres naturally get very much broken, but there is a common saying that if the material has only got two ends it can be re-made into yarn. This is rather far-fetched, but it serves to illustrate the perfection to which machinery has arrived. This material is then mixed with pure wool, noils, and cotton so as to impart adhesion among the different fibres, the wool being added in quantities varying according to the quality of the material to be produced.

Shoddy is obtained in a similar manner, but from softer materials, such, *e.g.*, as jerseys, stockings, and various underclothing, and is usually of a better quality. It had its advent about the year 1813, and was first turned to practical advantage by Benjamin Law, Batley, which place has always been the chief seat of this section of the woollen industry. Simultaneously with the blending, each sheet or layer of wool, shoddy, mungo, or noil, &c., is oiled. The blend is then put into a machine called the "Fearnought," which is similar to a small carding machine in principle. Its chief object is to thoroughly mix the different sorts. The next operation to be performed is "carding," the object of which is to more thoroughly open the wool and separate fibre from fibre and rearrange them so as to form one continuous sheet or film of fibres, which can be collected into a thick roving or divided into any reasonable number of small rovings. These carded and condensed slivers or small rovings are next placed upon the "woollen mule spinning frame" (see Plate 6), which is a wonderful and ingenious piece of mechanism. Each sliver is passed through a pair of revolving rollers to the spindles fixed on a travelling carriage, which, receding from the rollers, draw out the threads, whilst the revolving spindles put in the twist. When the carriage has travelled a given distance the rollers cease delivery, but the carriage with the spindles continues to recede, and so the thread is drawn out to the required fineness. When the carriage is brought to a standstill the twisting operation continues, but inasmuch as the length of the yarn is diminished by this twisting the carriage very slowly commences the return journey. When the required amount of twist has been put in the carriage quickly returns, during which time the yarn is wound on to the bobbins.

This "mule frame" is the chief mechanical agent in producing the artificial arrangement of the fibres of the modern woollen thread, as distinguished from the arrangement of the fibres in its contemporary the worsted thread. At one time the worsted yarn could only be made from long wool and the woollen was chiefly made from short wool, but with the improvements in machinery to-day the raw material from the

same pack and kind of wool may be sent forth for conversion into either woollen or worsted threads, the difference being entirely due to the process of manipulation. The yarn may be made to be used either as warp or weft. The former is often twofold, and having a certain amount of turns or twists per inch so as to give it strength and durability, or, as is frequently the case in the woollen manufacture, the threads for warp are used singly, but having more turns per inch and with twist in the contrary direction to that of the weft. By adopting the latter warp, the goods manufactured are softer and fuller in the handle.

"Warping" is the first process through which the yarn passes preparatory to weaving. It consists in collecting and reducing to one uniform length the threads which are intended to be arranged longitudinally in the cloth. Other minor processes, such as sizing, dressing, and twisting or looming are also necessary. All things being ready for weaving the "Power Loom" of the present day deserves special mention.

An illustration showing a "Modern Power Loom" is given in Plate 7, also a diagram of the "Hand Treadle Loom" is shown in Plate 4.

Weaving by power involves a series of automatic movements, some of which are continuous while others are intermittent. Further, some of the motions consume considerably more power at certain periods than at others, and, again, should anything go wrong in the process of weaving the cloth much damage would be done to the material if some automatic mechanism were not applied to arrest the progress of the loom. Among some of the movements to be accomplished in power-loom weaving may be enumerated (1) "Shedding," which motion is eccentric or variable, and is performed by means of numerous forms of outside mechanisms, such as tappets, witches, dobbies, or Jacquard machines; (2) "Picking," which is intermittent and consumes a very great amount of power—in some cases sufficient to almost stop the loom; (3) "Beating up the weft," which is also a variable motion; (4) "Taking up the cloth;" (5) "Letting off the warp" to correspond with the amount of cloth taken up; (6) "Stoppage of the loom," automatically, should the weft break or run out; (7) "Stoppage of loom" should the shuttle from any cause or defect fail to reach its destination, when a rod connected with the belt fork causes the belt to move from the fast to the loose pulley and so mechanically stop the loom; (8) "Shuttle-box mechanisms;" when there are several colours to put into the same cloth an alteration of the position taken up by the shuttle boxes with the shuttle mechanically takes place.

In addition, each of these motions involve a series of other mechanisms, all of which must work in unison and completely perform their work in a very brief space of time. This period is represented by one pick, and it is no uncommon thing for broad woollen looms to make as many as 80 to 110 picks per minute. I saw a narrow loom a short time ago for weaving cotton making 300 picks per minute.

These initial difficulties attempted by Dr. Cartwright and succeeding inventors have now been largely overcome, many of them very satisfactorily; nevertheless, this highly interesting and ingenious piece of mechanism, bringing in its train wealth and prosperity to the nation which first and generally adopted it and applied it to practical purposes, has still many problems connected with it awaiting solution. After the fabric has been completely woven there are many processes through which it must yet pass ere it is in a fit state to be used as a garment of clothing or for decorative purposes. These processes vary with the class of goods made and the finish required, and may be enumerated as follows:—

"Burling" or "mending," which is performed by young women, and comprises the taking out of all knots, repairing of broken threads, and replacing others which are defective.

"Scouring," which frees the cloth from oil, size, and dirt.

"Dyeing," which gives the fabric the requisite colour or shade.

"Milling" or "fulling." Wool, and especially the fine sorts, has a tendency to shrink very considerably when subjected to moisture, heat, and pressure; the fibres and yarns in the fabric become a homogeneous mass which can be carried to such perfection that it appears a solid, compact sheet. This factor is taken advantage of by the manufacturer of the finest and best woollens, only the best "milling" wools being selected.

"Raising" consists in pulling up the fibres on the surface and even out of the body of the cloth so as to form a dense nap or pile of fibres. This operation is done on a machine called the "raising gig," fitted with metallic teazles, though a species of thistle fixed in a revolving cylinder is still employed and preferred by some. The pile or nap is then brushed all one way and shorn to one uniform length.

"Crabbing" imparts a permanent lustre to the pieces which are wound and rewound upon perforated cylinders, through which steam is blown.

"Steaming" and "pressing" are the last processes to be performed, and impart "handle" and appearance to the finished fabric.

Most of the foregoing processes are repeatedly performed, in addition to which they vary with type of cloth and finish required. From the foregoing description of the various processes it will be very evident that the woollen industry embraces most exclusively a very large number of trades and professions, thereby giving employment to a vast number of the population, in addition to which there are numerous other trades directly or indirectly dependent upon it, the making of power looms and other textile machinery being notable illustrations.

Reverting to the manufacture of mungo and shoddy cloths, which now form no inconsiderable part of the woollen industry, we might add that in addition to British waste materials such as rags, tabs, &c., and much wool, chiefly of the English sort, over 30,000 tons of rags are annually imported from the colonies and foreign countries to be ground into ragwool, and made into yarn or manufactured into cloth.

Large quantities of this cloth are sold to the ready-made clothier for the home trade. It is no exaggeration to state that, as a result of the discovery of shoddy manufacture, many millions of people are now clothed in garments made up of remanufactured material, who would otherwise have to be content with the pickings up from a second-hand clothier, and whose garments are much better articles of clothing than their name implies or as accords with the common belief. No doubt this class of trade has affected the pure woollen trade, especially "Scotch Tweeds," but it was necessary to meet the demand for cheapness as well as to utilise waste products, the manipulation of which must be a gain to the nation.

A fairly comprehensive idea of the present status of the Woollen Industry may be formed when it is pointed out that, in addition to supplying nearly the whole demand of the home trade in woollens, considerable quantities are exported to the colonies and foreign countries, the totals of which are given in the following statistics, gleaned from the Board of Trade returns for the last five years, but it should be noted here that with the improved methods in wool combing and other processes in worsted spinning (not herein enumerated) many wools which were formerly exclusively used for woollen manufacture are now made into worsted yarns, which fact must be borne in mind when studying the accompanying table of woollen exports.

Exports of Woollen Yarns and Fabrics.

	1894.	1895.	1896.	1897.	1898.
Heavy Woollen Tissues, Weighing above 11ozs. per Square Yard:—	£	£	£	£	£
Broad, all wool	1,613,962	2,164,013	2,073,333	1,880,844	1,742,002
,, mixed with other materials	1,243,056	1,757,337	1,700,089	1,424,671	1,225,103
Narrow, all wool	131,778	146,403	142,629	101,656	90,991
,, mixed with other materials	35,189	44,683	33,395	26,404	33,007
Light Woollen Tissues, Weighing up to 11ozs. per Square Yard:—					
Broad, all wool	697,809	957,275	993,314	812,375	715,919
,, mixed with other materials	520,080	750,246	901,639	744,792	690,925
Narrow, all wool	160,400	192,760	214,257	173,415	171,530
,, mixed with other materials	167,259	191,954	216,981	225,403	223,496
Flocks and Ragwool	374,327	359,386	338,353	329,883	314,871
Woollen (Carded) Yarn	85,551	118,984	103,881	100,469	83,498
Flannels	305,961	369,258	409,626	350,329	331,904
Blankets	396,880	494,265	588,177	368,409	364,137
Shawls	98,775	92,260	102,612	77,771	73,834
Rugs, Coverlets, or Wrappers	356,261	450,595	530,474	471,286	490,814
Totals	£6,187,288	£8,089,419	£8,348,760	£7,087,707	£6,552,031

The export trade forms a considerable factor in the English foreign commerce, since every pound of yarn or yard of cloth exported assists in paying for the large consignment of foodstuffs, &c., imported into this country, and which cannot be produced within its borders—at least not in sufficient quantities to satisfy the demands of the people; hence the woollen trade and textile industries generally deserve every encouragement in respect of technical education, for success now depends on scientific knowledge, research, and an intimate acquaintance with the inventions, the experiments, the successes, and the failures of others. Every manufacturing industry which is to obtain and maintain a position in the commercial world worthy of the name must seek to educate its workpeople by giving them a progressive course of instruction in the scientific and technical principles underlying their trade, and whether our nation does or does not provide every facility in this direction we may rest assured that textile production will continue its progressive course and will be led by those who have made themselves capable of leading by adapted thought and knowledge, combined with enlightened energy which directs its force to meet the vast and varied requirements of the world.

EXPLANATION OF THE PLATES.

Plate 1.

This shows two "hand cards" as used formerly for "carding" wool. The "working card" on the right was repeatedly drawn through the wool in the "stationary card" held in the left hand. Above these is a roll of carded wool, ready for the one-thread spinning wheel.

Plate 2.

The one-thread spinning wheel. A length of carded wool is shown applied to the spindle, and is ready to be attenuated and twisted to the required fineness of thread for the woollen weaver.

Plate 3.

One of the most primitive methods of weaving. The warp is held tightly during the weaving process by means of a strong cord and two stout rods driven into the ground. When the weaver has woven a few inches of cloth he unties the ropes on his right and so lets in some more warp, which thus permits him to wind up the cloth already woven, the operation being repeated until the whole web is woven.

PLATE 4.

The hand treadle loom, with Kay's fly shuttle box. The illustration shows the type and principle of loom employed previous to the invention of the power loom, and which was largely employed for many years afterwards, whilst for weaving special kinds of fabrics it is still used.

PLATE 5.

The relative length of "staple" of a few of the very numerous varieties of wools now grown throughout the world. Fig. 1, Port Phillip lambs' wool; Fig. 2, Port Phillip sheep's wool; Fig. 3, Saxony merino wool; Fig. 4, American merino wool; Fig. 5, Adelaide wool; Fig. 6, Swan River wool; Fig. 7, Buenos Ayres wool; Fig. 8, Cape mohair wool; Fig. 9, Australian crossbred wool; Fig. 10, English (Northern Counties) wool; Fig. 11, English (Kent) wool.

PLATE 6.

The woollen mule spinning frame, which shows conclusively the very extraordinary progress invention has made upon the one-wheel spinning frame, which method was in common use until just over a century ago.

PLATE 7.

The modern power loom for weaving heavy woollens, largely used by English and Scotch manufacturers. The width of piece can be woven up to 120 inches, and the loom usually runs at 90 picks per minute. It forms an interesting comparison with the type of looms and methods of weaving shown in Plates 3 and 4.

ILLUSTRATIONS

OF

THE WOOLLEN INDUSTRY.

Plate 1.

Plate 2.

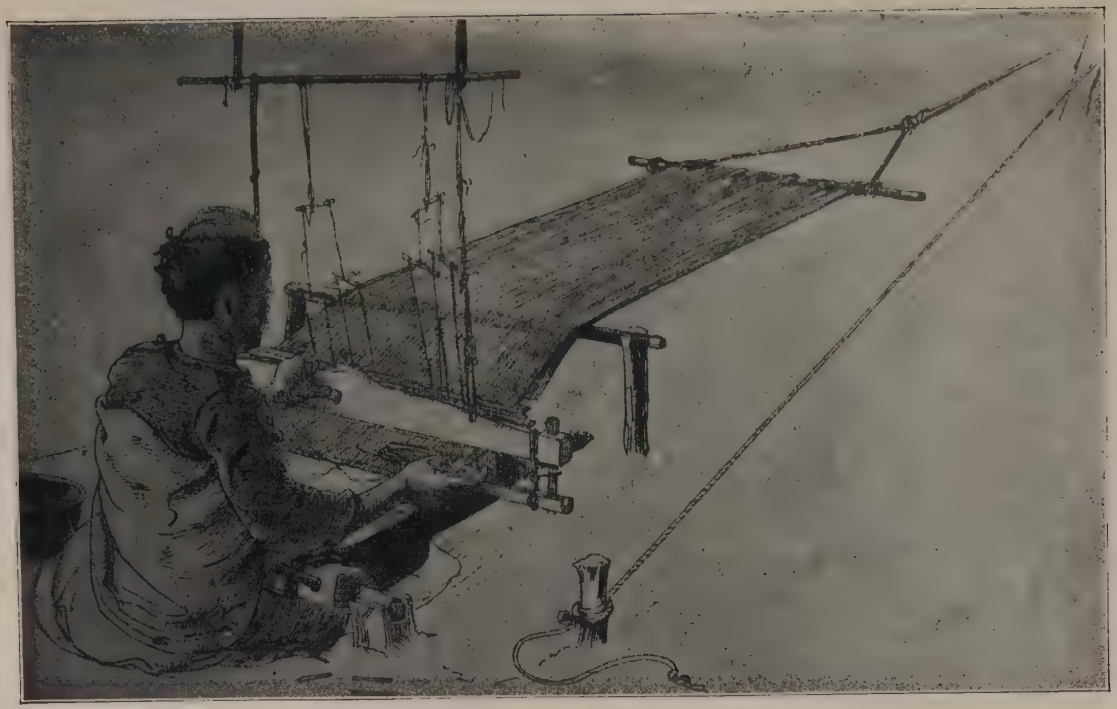

Plate 3.

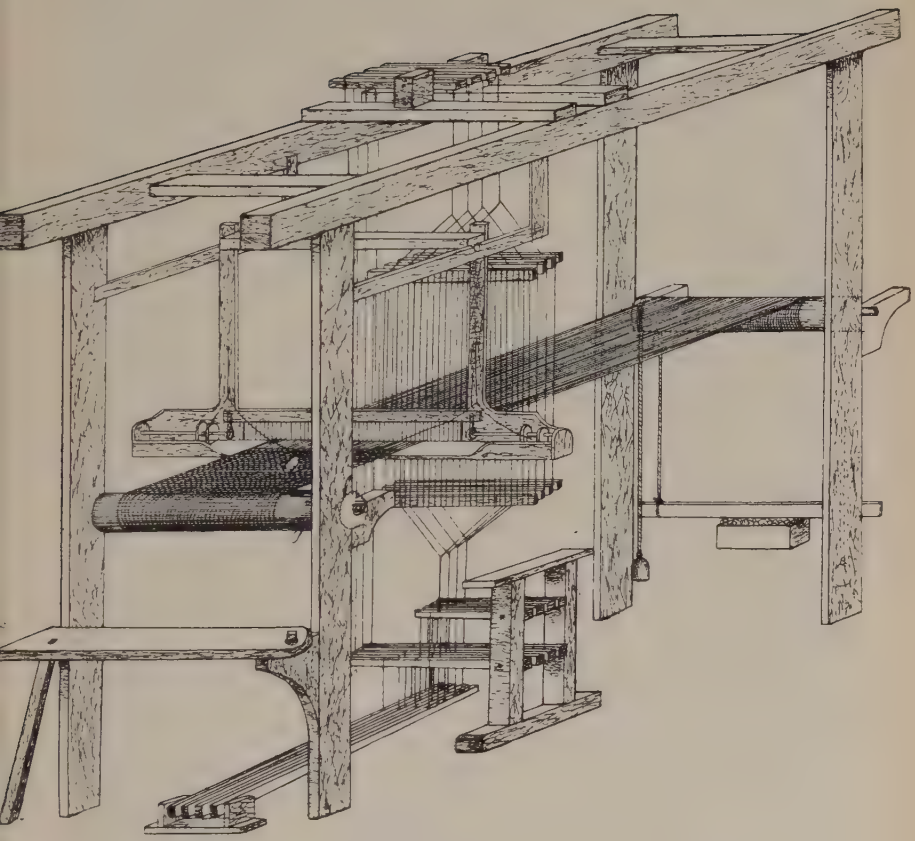

Plate 4.

Plate 5.

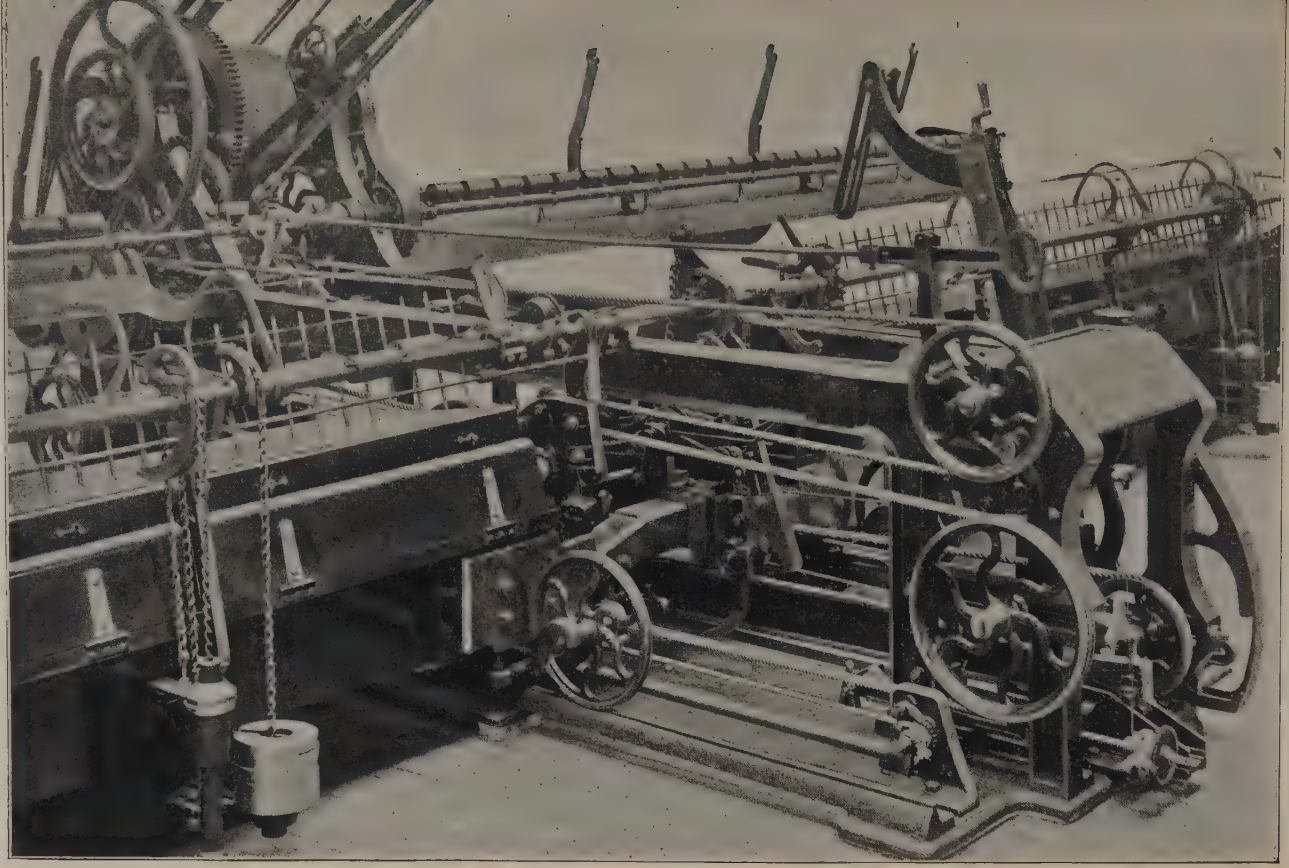

Plate 6.

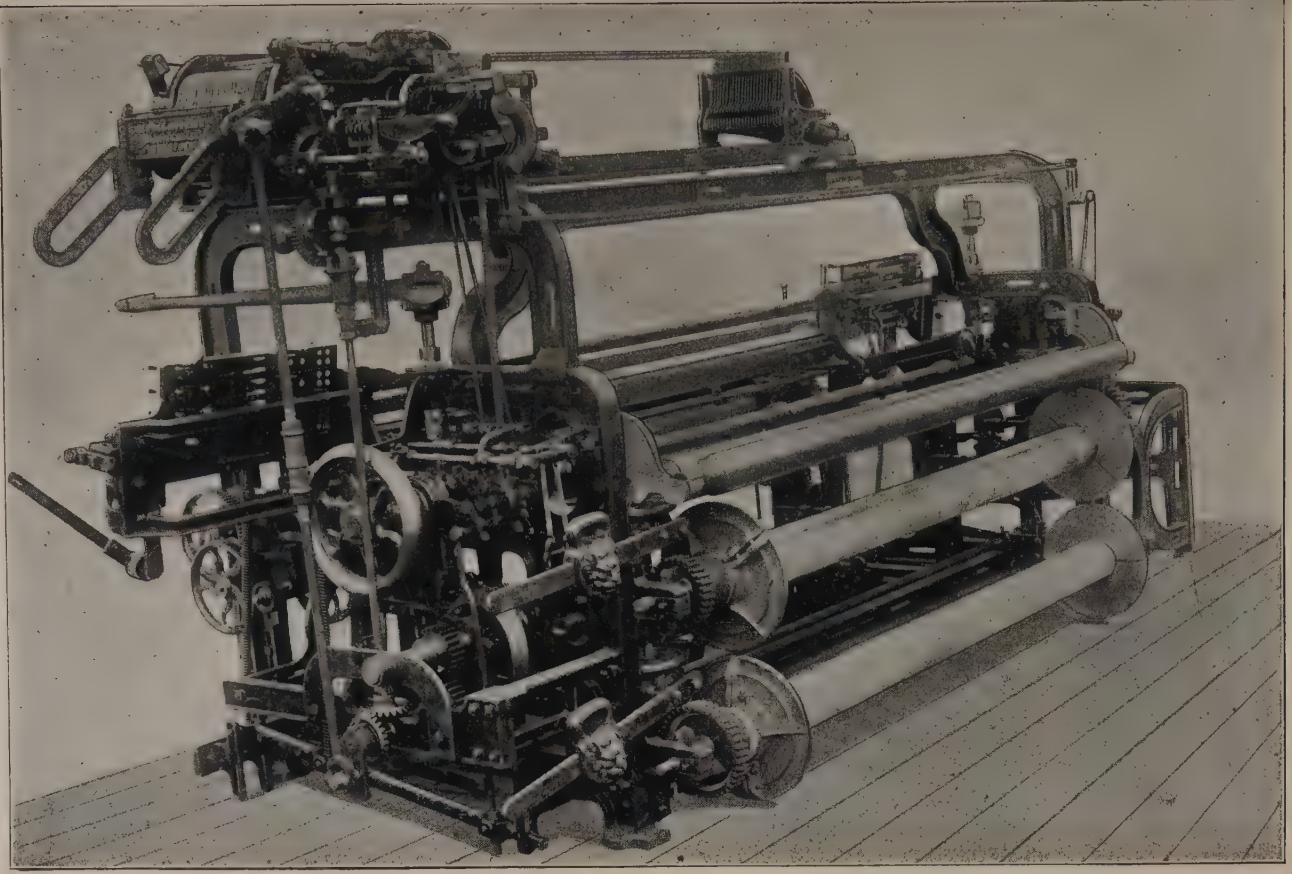

Plate 7.

A Just Basis of Taxation.

BY FREDERICK VERINDER,

General Secretary of the English Land Restoration League.

Taxation may create monopolies, or it may prevent them; it may diffuse wealth, or it may concentrate it; it may promote liberty and equality of rights, or it may tend to the establishment of tyranny and despotism; it may be used to bring about reforms, or it may be so laid as to aggravate existing grievances and foster hatred and dissension among classes; taxation may be so controlled by the skilful hand as to give free scope to every opportunity for the creation of wealth or for the advancement of all true interests of States and cities, or it may be so shaped by ignoramuses as to place a dead weight on a community in the race for industrial supremacy.—*Prof. Ely, "Taxation in American States and Cities," p. 55.*

THE interest in questions of taxation, now so generally apparent, is no new thing. For more than five centuries—from the march of the Kentish men on London under Wat Tyler to protest against an obnoxious poll tax, to the march of the East End match girls on Westminster to protest against Mr. Lowe's proposed tax on matches—there has never been wanting either the disposition or the occasion to criticise the methods by which funds have been raised to meet the nation's expenses. A question of taxation led to the civil war which cost an English king his head; another question of taxation lost to Britain her American colonies. One of the greatest and most costly agitations of the present century had for its object the Repeal of the Corn Laws—again a question of taxation. In our own generation, the taxation of land values has assumed an importance which even the most exciting happenings in foreign politics have been unable to overshadow. In Parliament and at bye-elections, in the correspondence columns of the newspapers and in the halls of working men's clubs, in the lecture-rooms of economic learning and at street corners, the relations of taxation to land and labour, its bearings upon the housing and health of the people, upon poverty and monopoly, are topics of never diminishing interest. It is no longer the equity of

this or that particular tax which is called into question. The movement to which Henry George's "Progress and Poverty" gave, in the early eighties, a new and world-wide impetus is rapidly developing into a general assault upon the whole of our present methods of taxation, national and local. It is not, of course, pretended that the hundreds of local authorities who, in their desire for "new sources of revenue," are petitioning Parliament for power to rate land values, or the thousands of Liberal, Radical, and Progressive candidates who declare on election platforms their sympathy with the demand for the taxation of land values are subscribers to the full programme of the English Land Restoration League, or are consciously helping towards its realisation. But it is nevertheless true that the arguments which they are compelled to use lead logically and inevitably to the demand for a new, simple, and just basis of taxation in substitution for the existing chaos of methods of taxation—always complicated and usually unjust. The present Government and their immediate predecessors in office have, each in their own way, contributed to give point to the discussion, for the questions raised by Sir William Harcourt's Budget of 1894, and by the Agricultural Rating Act of 1896, go down to the very roots of the theory of taxation.

I.

A Parliamentary Return issued just before the Constitutional Reform of 1832 showed that, at that period (1829), duties of Customs and Excise to the amount of more than six millions sterling a year were levied upon raw materials of manufacture. Manufactured articles of all kinds were burdened with protective duties, which ranged from 20 to 75 per cent on their value. Agriculture was "protected," for the benefit of rural landlords, by heavy duties upon bacon, butter, cheese, hay, hops, hemp and hempseed, lard, linseed and rape oils, mules and asses, peas, potatoes, seeds, tallow, tares, wheat and all other kinds of grain, flour, and meal; as well as by the prohibition of the importation of meat and of living animals for food. Tea, sugar, coffee, &c., were very heavily taxed on a differential scale intended to favour colonial production.

So many of these imposts have been abolished or reduced since the first Reformed Parliament met in 1833 that we are often tempted to overlook the fact that our methods of taxation are still so complicated that it is impossible for a citizen to find out when, and how, and how much he is contributing towards the national expenses.

John Smith is taxed upon his income if he is fortunate enough to earn more than about £3 a week and honest enough to make a

correct return. As soon as he begins to spend it, he is taxed again. In the prices which he pays for his tea, coffee, chicory, cocoa, chocolate, plums, prunes, raisins, currants, and figs are included various taxes, levied indirectly by way of Customs or Excise. Unless he is a teetotaler and non-smoker he is taxed even more heavily upon his beer, wine, spirits, liqueurs, cordials, tobacco, snuff, and cigars. He pays a stamp duty on the agreement or lease when he takes a house, and as soon as he occupies it he becomes liable for inhabited house duty, assessed upon the gross annual value of the house and its site, and for local rates assessed upon their net annual value. If he takes up the profession of a barrister, or solicitor, or physician, or officer in army or navy, he must pay a stamp duty on admission, and, in the case of a solicitor, must, in addition, take out an annual certificate. If he goes into business as an auctioneer, banker, house agent, game dealer, game-keeper, hawker, pawnbroker, pedlar, dealer in plate or in patent medicines, or vinegar maker, he must pay every year for a licence. He cannot import, produce, or sell, without an annual licence, beer, wine, spirits, cider, perry, tobacco, snuff, or cigars. If, abominating all these things, he opens a drunkards' retreat, he must pay an annual tax of 10s. per inmate, with a minimum of £5 a year. In his business he pays stamp duties of varying amounts on his cheques, receipts, bills of exchange, charter-parties, bonds, contract notes, stock and share certificates, transfers, &c., &c. If he uses collodion, ether, chloroform, naphtha, iodide of ethyl, chloral hydrate, spirit varnish, perfumed spirits, or transparent soap containing spirit, he is taxed on each one of them. In his leisure hours he plays a game of whist with a taxed pack of cards, takes the air in a taxed carriage or motor car, or walks out with his taxed dog, carrying a gun licence in his pocket. If he indulges in the luxury of keeping a man-servant, or of using armorial bearings, he is taxed; but he is also taxed on his insurance policy, and, if he is very saving, he but leaves the more to be taxed after his death.*

The difficulty of finding out how much he really does pay towards the expenses of the State is increased by the fact that the taxes on his spendings are, in many cases, levied in an indirect

* As if the existing complications were not enough, suggestions for new taxes are continually made. The lessons of recent political and economic history have obviously been wasted upon the people, including, in some cases, even Chancellors of the Exchequer, who, within the last few years, have suggested taxation upon such oddly various subjects as cycles, mural advertisements, matches, vans and wheels, cats, theatre tickets, agricultural horses, bachelors, and nobiliary titles. Even more hopeless appears to be the case of the few enthusiasts who, evidently unacquainted with the complete breakdown of a similar experiment in America, have recently put forward a proposal for the taxation of "all property" upon its capital value.

manner, and are increased, before he pays them, by the profits of the traders through whose hands the taxed commodities reach him; that he is often quite unconscious that he pays this indirect taxation at all; and that in respect of some of the taxation, mainly local, of the burden of which he complains most loudly, experts assure him that, as a matter of fact and in spite of appearances, he does not pay it at all.

With regard to some of these taxes, there is no doubt that statesmen have contrived and continued them for the express purpose of facilitating the collection of a large revenue by concealing from the multitude a great part of the fiscal burden which they are made to bear.

> To levy a direct tax of 7 per cent is a dangerous experiment in a free country and may excite revolt; but there is a method by which you can tax the last rag from the back and the last bite from the mouth without causing a murmur against high taxes, and that is, to tax a great many articles of daily use and necessity so indirectly that the people will pay them and not know it. Their grumbling will then be of hard times, but they will not know that the hard times are caused by taxation.

Such is the theory of indirect taxation attributed to William Pitt. It was stated more briefly and with brutal frankness by the French statesman who defined indirect taxation as "a scheme for so plucking geese as to give the most feathers with the least squawking." Dr. Johnson probably had something of this kind in his mind when he wrote his famous definition, "Excise—a hateful tax levied upon commodities, and adjudged not by the common judges of property, but wretches hired by those to whom excise is paid;" and it was nothing less than a stroke of etymological genius which derived the name "tariff," applied to a system of indirect taxation, from Tarifa, the headquarters of the pirates who used to levy toll on the trade of the Mediterranean shippers.

Apart from a small land tax—part of which has been redeemed, and part of which is still paid on a valuation over 200 years old*—the great bulk of our national revenue is raised, as we have seen, by taxes based upon (1) earnings, or rather income; (2) spendings; (3) savings or accumulations; (4) processes of production; (5) transactions of business. This arrangement is open to the criticism that no one of these things, nor all of them together, afford a just basis for calculating what a citizen should pay as his proportion of the national expenses; and that, because the existing bases of taxation are not just, the practical working of our existing system is not fair as between man and man and between class and class. The effect of our present methods is to restrict

* See "The Land Tax" (English Land Restoration League's Tract, No. 5. 376 and 377, Strand, London, W.C. One penny).

consumption by increasing the cost of commodities; to hamper distribution; to discourage production; to foster monopoly; to penalise improvement and thrift; and to oppress the mass of the people for the benefit of favoured classes, and of one class in particular.

If this indictment can be maintained, the frequent appearance of articles on taxation in this "Annual" and the growing interest of Co-operators in the subject is easily explained, for the members of Co-operative Societies unite within themselves the functions of consumer, distributor, and producer, and the natural development of Co-operation is hindered at every turn by the workings of an unjust fiscal system.

One of the classical principles of taxation laid down by Adam Smith as the basis of a just fiscal system ran thus:—

> Every tax ought to be so contrived as both to take out and keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the State.*

This obviously fair maxim is grossly violated by every one of the existing "indirect taxes." Take, for instance, the duty upon tea. The importation of tea will appear, at least to every tea-drinker, as a meritorious public service, worthy of encouragement. But the Government behaves as if it thought otherwise. Every pound of tea which arrives in this country is liable to be seized and imprisoned—held "in bond"—until the importer releases it by paying a fine of fourpence. In the case of the cheapest kinds of tea this fine or duty doubles or more than doubles the cost. The traders who handle the tea naturally charge their profits upon what the tea actually costs them, *i.e.*, upon the sum made up of the cost of the tea *plus* the amount of the tax. The very poor, who buy tea in small quantities from retail shops, pay a larger number of middlemen's profits, not only upon the first cost of the tea, but also on the original amount of the tax. The injustice is increased by the fact that the same sum per lb. is levied upon all kinds of tea. Tea which sells retail at 1s. 4d. per lb., or less, is taxed 4d.; and so is the very rare and choice tea which is sometimes sold by auction at 30 or 35 guineas a pound. I am informed that the first cost of the teas usually handled by the Co-operative Wholesale Society varies from 5½d. to 2s. 5½d. per lb., with an average of 10d. The percentage of taxation, therefore, varies from 72·7 to 13·6, with an average of 40·0. But there is plenty of tea which costs less or more than the prices just quoted, and on the very cheapest the tax may be as high as 140 per cent on first cost. No one but an expert in the tea trade could say how much per cent the tax amounted to on any particular pound of tea, for when teas

* "Wealth of Nations," Book V., ch. ii.

of various prices are "blended" the various rates of taxation are blended also. But it is quite certain that, in order that the Exchequer may receive its fourpence, every consumer of tea has to pay more than fourpence, and that the excess is generally greater in proportion to the poverty of the person who pays. The poor washerwoman who buys cheap tea by the ounce, and who has very few shillings to spend on her one luxury, gets far less tea and pays far more taxation for every shilling than the rich man who buys a better quality by the chest. It is true that the intermediate profits may be intercepted by Co-operation, but even Co-operation cannot avoid the injustice of the original tax upon what has become an almost universal necessity of life. Moreover, all consumers have to pay for the cost of the interference with the operations of trade caused by Customs regulations made for the protection of the revenue.

The tax per pound upon coffee, cocoa, chicory, and dried fruits is smaller than that upon tea, while the duties upon alcoholic drinks and tobacco are far heavier, amounting in some cases to hundreds per cent upon first cost. But be the duty large or small, it always takes from the consumer, who finally pays, a sum larger than that which is levied by the Custom House officer. In the case of brewing and distilling, the cost of the products is also very largely increased by the vexatious and complicated restrictions which it has been thought necessary, in the interests of the revenue, to impose upon the processes of production*; and the trade is further burdened with the profits of a giant monopoly, also created in the interests of the revenue, which has become the despair of modern reformers. Nor can the friends of temperance console themselves with the reflection that this load of taxation (amounting in 1898–99 to nearly £37,000,000 in Customs, Excise, and Licences) has any appreciable effect in lessening the consumption of alcoholic liquors. There is good reason to believe that all this indirect taxation has the effect of causing a good deal of adulteration. In the case of tobacco, at any rate, we have on this point the frequent testimony of Chancellors of the Exchequer who have more than once reduced the duty on this very account.

* * * * * * *

Not only are these indirect taxes, which roll down from the Custom House to the consumer like a snowball, gathering volume as they go, unjust to the individuals who pay them; they are far less profitable to the Exchequer than most direct taxes would be,

* This was worked out with great elaboration of detail by Charles Tennant in his "People's Blue Book," of which a fourth edition was published in 1872. It is much to be wished that the facts and arguments of this valuable book could be brought down to date and reissued in a cheap form.

for they are exceedingly expensive to collect. All over the country, and especially at all the large ports, a large army of men has to be maintained for the purpose of fining the manufacturers and importers of dutiable articles and of exercising a vexatious interference with production and trade. Moreover, in order to prevent that unauthorised form of free trade which is called "smuggling," every part of the coast where a cargo could possibly be landed from a small boat has to be continually watched in order to prevent the importation of goods upon which no fine has been paid. For several years the "Financial Reform Almanac" published, under the title of "Curiosities of the Customs," a summary of a Return for 1874 issued on the motion of Sir John Lubbock in 1876. At ten ports, *where nothing was collected*, fifty-three able-bodied servants of the Crown, costing the country £7,200, wrote 18,297 official letters and forms. At eight other ports, fifty Customs officers collected in the year a total of £56—about a halfpenny a head per day—at a cost of £6,607 and of 24,480 sheets of official paper. At seven ports, where the collection amounted to £2,611, the fifty-six officers cost £7,471, and sent up 25,387 letters and forms. At a dozen other ports it cost £7,777 to collect £15,305, and forty-six men were kept employed in making 25,625 official returns and collecting under £1 a day each. Of course, the larger ports do far better than this, but the general collection has to bear the cost of all this appalling waste of labour and money.* But it is certain that even the published accounts of the cost of collecting the Customs are far from representing the whole cost of collection. An unknown amount must, for instance, be added for the cost of that portion of the navy which is engaged wholly or partially on preventitive service.

The taxes upon business transactions, mostly by way of stamp duty or licence duty, often very small in amount, constitute on the whole a considerable burden in time and trouble as well as in money. (The stamp duties produced in 1897–98 a sum of about 7½ millions.) There is no reason why the payment of one's just debts, or the making of an agreement, should be the subject of a tax. If A. agrees to sell goods to, or to do work for, B. to the value of £2, and if B. pays by cheque and requires a receipt, it costs B. £2. 0s. 1d. in order to pay A. a net sum of £1. 19s. 11d. B. is already paying his banker, directly or indirectly, for taking care of his money, yet he cannot use the smallest part of it, once paid into the bank, without being fined a penny. If the two men

* The revelation of waste from which the above is quoted proved so damaging that the Government has ever since refused to issue any further reports of the sort. It is quite safe to assume that the condition of things is at least as bad at the present time.

make an agreement, the sixpenny stamp adds no validity to it. It represents pure blackmail, levied by the Government on a presumably honest transaction, and enforced by the threat of a very heavy penalty before the agreement can be produced in evidence if its subject-matter should ever come under inquiry in a court of law.

As regards the income tax, which stood in 1878 at 3d. in the £ and is now 8d., an attempt has been made in recent years to meet some of the criticisms directed against this always unpopular impost by a system of exemptions and deductions which, up to £500, give an approach to graduation. The tax is free from the worst objections which lie against indirect taxation. But it is open to the objection that it operates, in very many cases, as a fine upon industry. As long as John Jones earns no more than £160 a year he is free of income tax. If, by working harder, he increases his earnings beyond £160, the State takes $3\frac{1}{3}$ per cent of the increase; or, if he is industrious enough to earn more than £400 a year, an even larger proportion.

The existing system is sometimes defended on Adam Smith's ground that "the subjects of every State ought to contribute to the support of the Government as nearly as possible in proportion to their respective abilities." Smith apparently believed that ability to pay taxation could be measured by "the revenue which they respectively enjoy under the protection of the State." As "revenue" under £160 a year is exempt from income tax, it is necessary that taxes should be levied on articles of general consumption in order that the working man may enjoy the privilege of contributing towards the expenses of the State. But, even so, there is no necessary relation between either income or expenditure and the ability to pay taxes. It has already been shown that the taxes on food and drink fall with the most crushing weight upon the very poorest. The middle-class man with a small income, not greatly exceeding £160, and a large family, pays as much in income tax, and perhaps more in taxes on commodities, than a bachelor on the same income, and may be impoverished by taxation which the bachelor could pay with ease. A doctor or clergyman may be poor on an income double as great as that upon which an artisan, who is not compelled to keep a carriage or pay a curate, could live in comfort and yet pay no income tax. A miser who hoarded his wealth and lived on bread and water in a garret might escape nearly all taxation except the death duties, and might escape even these if he gave away his money just before he died.

How can a tax be deemed just which falls alike upon the income of the urban landlords who, as John Stuart Mill says, "grow richer, as it were, in their sleep without working, risking,

or economising," and upon the earnings of the professional man who has qualified himself by a long course of study to work hard for every guinea he earns? It is sometimes argued that there is no real injustice in indirect taxes, because any man may avoid them by abstaining from the use of the taxed articles. I have often wondered what the death rate would have been in the early years of this century if this suggestion had then been generally acted on; for, at that time, as has been well said, "everything that was useful, or good, or beautiful in nature or art; everything that was sweet to the palate, wholesome for the body, needful for raiment, grateful to the eye, or pleasant to the taste or smell was taxed." It is no argument in favour of taxes upon expenditure that their injustice may be avoided by abstaining from the innocent enjoyment of things desirable and desired; and the very fact that such abstention is possible proves that expenditure upon dutiable commodities is no just measure of the "ability" to pay taxes.

The fact is that "ability to pay" must be abandoned by anyone in search of a really just basis for taxation. The theory has never been logically carried out except by certain despotic Governments (mostly Oriental). Isaac of York and other mediæval Jews probably heard all that was to be said in favour of it. Robin Hood and Captain Kidd certainly acted upon it. The mere fact that one man has more wealth than another does not justify the State in taking away part of his property, provided he came by it honestly, save in those cases of supreme need in which the State admittedly has the right to call upon its members to

> Spare neither land nor gold,
> Nor son nor wife, nor limb nor life,

for the common salvation.

Adam Smith's maxim that citizens should pay taxation "in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the State," appears to imply, not only that ability to pay taxation bears some fixed relation to income, but also that income bears a fixed relation to the protection afforded by the State. This is certainly not true of *earned* incomes, which are proportioned to different degrees of ability and industry rather than to different degrees of State protection. But the form of his reference to the State is welcome, for it suggests that taxation is, in some sense, a return from the individual to the State for services received or benefits enjoyed. If it is possible to find an accurate measure for the benefits which each citizen receives from the community in which he lives it will not be necessary to go farther in the search for a just basis of taxation. This inquiry will also conveniently carry us over from the subject of national to that of local taxation.

II.

On March 6th, 1899, Mr. John Hepper, F.S.I., F.A.I., read before the Leeds and Yorkshire Architectural Society a paper on "the business, peculiarities, progress, and possibilities" of Leeds, confining himself "to such matters as combine to make or affect stability and value." *

It is instructive to notice what, from a purely professional point of view, are the "matters which make or affect value." Briefly summarising Mr. Hepper's comprehensive and lucid statement, this is what we learn about Leeds:—

Population in 1899 about 420,000 (more than doubled since 1851). The people are industrious, skilled, receptive, intelligent, of a careful, saving character, capable of adapting themselves to altering circumstances and of turning to any kind of manufacture.

Position and Communications.—About midway between London and Edinburgh, and between the eastern and western seaboards. "Seated at the convergence of systems of road, rail, and waterways of unsurpassed centrality, Leeds is found to be one of the most convenient distributing centres in the kingdom." The level character of its manufacturing areas reduces the cost of cartage to a minimum, while its residential districts are on rising ground fairly free from the smoke. Lovely country resorts lie within easy reach of the city.

Mineral Resources.—Leeds has within its limits or near its borders supplies of coal, brick clay, fireclay, ironstone, and building stone.

Industries.—Mr. Hepper specifies a large number and variety of manufacturing industries carried on in Leeds.

Municipal Advantages.—Besides the Town Hall and Municipal Buildings, the Corporation owns three Markets (Corn, Cattle, and General), a Free Library, a Fine Art Gallery, eighteen Parks and Recreation Grounds (total, 645 acres), and two groups of allotments. To these are being added five sets of Baths. The mileage of paved and macadamised roads has nearly doubled since 1866. The wide and excellent roads and the Municipal Tramways (all soon to be electric) afford easy means of communication between all parts of the city and suburbs. Municipal Gas Works supply gas of good quality at a cheap rate, and the Municipal Water Works furnish an abundance of soft water. The electric lighting has been recently taken over by the town. At least a million sterling has been spent in the making of roads and sewers and sewerage works and in street improvements. Four refuse destructors have been provided, and a large sanitary depôt. There are Municipal Hospitals for fever, smallpox, &c., and three Municipal Burial Grounds.

Local Taxation.—The rates levied by the Council for the year ended March 25th, 1899, were as follow: City Rate (including 1s. 3d. in the £ for School Board purposes), 2s. 2d.; Consolidated Rate, 2s. 11d.; Highway Rate, 9d. Adding Poor Rate, 1s. 4d., we reach, for the last completed year, a total rate of 7s. 2d. in the £, which appears to be about the average, on a ratable value of £1,522,092. The net debt of the city is £5,215,214 (= £12. 10s. 3d. per head of population).

* "Leeds: from a Surveyor's Point of View." (Leeds: Alf. Cooke. 1899.)

A JUST BASIS OF TAXATION.

Mr. Hepper gives from his own professional experience a few instances, taken from the central part of the city, of the effect of all this upon the growth of land values. Park Row, where, not more than twenty-five to thirty years ago, dwelling-houses were being converted into offices, now contains the Royal Exchange, all the great banks, and some of the leading insurance offices. East Parade is further west, and in 1862 its westerly side was still largely occupied with dwelling-houses. Some of the sales included the existing buildings with the land, but, as the houses were intended to be pulled down, the increase of value plainly attaches to the land as building land. I have thrown Mr. Hepper's figures into tabular form for convenience of comparison :—

	YEAR.		PARK ROW.	EAST PARADE.
			£ s. d.	£ s. d.
A	1862	Site of London, City, and Midland Bank..	*6 10 0	....
B	1862	Site of Hepper's Auction Rooms	....	1 12 0
C	1868	No. 10, East Parade	....	*5 7 3
D	1872	No. 11, East Parade	....	*6 18 0
E	1873	Property adjoining "F" on the south	*10 1 4	....
F	1888	Site of Prudential Buildings (northern half)	11 11 0	....
G	1893	Site adjoining "A"	30 0 0	....
H	1895	Nos. 10 and 11, East Parade (="C"×"D")	....	*10 3 3
I	1897	Ditto ditto	....	*15 5 0
J	1897	No. 12, East Parade	....	*15 12 2
K	1897	Site overlooking City Square (666 sq. yds)	75 0 0	....
L	1898	Same as "E," sold as building site	*34 9 0	....
M	1898	Site on north side of "A"	57 1 8	....

The figures given represent prices paid *per square yard*. Properties marked (*) obviously include building values, as above stated.

The plot marked K in the above table "formed part of the site of the old Court House. When the Town Hall was built and the Borough Courts were transferred thereto, about 1858, the Corporation sold the Court House and the open yard on the south, which, at that time, could not be built upon, for £6,000 to the Post Office authorities. Four or five years ago the Corporation bought the property back again for £20,000, with the restrictions upon the aforesaid yard removed, so that the whole could be built upon. After devoting about 600 square yards to widening the adjoining streets and improving City Square, the remainder sold for £49,500."

Mr. Hepper says he could quote similar instances of appreciation of land values "all over the commercial centre of the city." Indeed, in another pamphlet* he showed instances of land values in Boar Lane which increased between 1869 and 1895 at rates of 92, 98, 130, and 158 per cent, and in the same street an offer was refused of £135 per square yard for land which in 1867 cost Sir John Barran £27 (exactly one-fifth of the amount offered); "the present rentals made it more profitable for the owners to keep it."

* * * * * * *

I have drawn somewhat freely on Mr. Hepper's papers because their author is an expert of undoubted authority and unrivalled local knowledge, dealing with an important centre of population from a purely professional point of view. He does not profess to discuss theories, but to state facts. Yet the theory of the origin and growth of land values springs directly out of the facts which he records, for it is plain on the face of his statement that land is of great and increasing value in Leeds because the natural advantages of the position of the town and the abundance of mineral wealth which underlies it and its neighbourhood have attracted a large population; because that population is energetic and thrifty; because the Government, national and local, has done much to improve upon the natural advantages of Leeds, and to add to its attractions as a place for residence, for manufacture, and for commerce. The value of land in Leeds would be less than it is, in spite of its coal and ironstone, if its population were small; or if the national Government did not extend to it the protection of the national law; or if its people were idle and thriftless; or if Parliament had refused authority for the making of the railways and canals that serve it, or had insisted upon their construction along some other route; or if the City Council had spent the rates less wisely and generously in providing municipal services and effecting town improvements. In a word, land values are created by the presence, the industry, and the expenditure of population.

It is clear that Mr. Hepper's professional experience does not lead him to attribute the increase of land values to the activities of those who receive them. In one of his pamphlets he makes no reference to the landholders save this: "The expansion of the city is not trammelled and hindered by great landlords who will only sell or lease on their own terms." This can only be imputed to the landlords for righteousness on the principle which led the schoolboy to say that pins had saved the lives of a great many people—"by not swallowing them!"

* "Movements of Values in Freehold Urban Districts, with Special Reference to Leeds." Paper read before the Yorkshire Branch of the Surveyors' Institute on October 7th, 1895. (Leeds: Alfred Cooke, 1895.) See pp. 14, 15.

In the other pamphlet, already referred to, Mr. Hepper plainly states that—

> As communities grow in number and wealth they enlarge their borders and enhance the value of the land around them, while, probably, the owners of the land may be contributing nothing towards the increased value.

Mr. Hepper dwells at some length upon two other facts: (1) the tenure of land in the city is almost entirely freehold; (2) the rate of interest is low, with a tendency to fall lower. The first affects the division of land values among owners rather than their origin; the second is almost certainly due to the industry and thrift of the workers of Leeds causing money to be plentiful.

What is true of Leeds is more or less true of every civilised community. The relation of population to land values is, of course, more readily seen in cases where the growth of population has been exceptionally rapid. In such instances as Johannesburg and Dawson City the influx of population has, within the last few years, converted barren wastes, vast tracts of which could be bought for next to nothing, into crowded cities, where sites are sold by the square foot. In many a colonial city the price of a site for a single block of offices exceeds the amount which the Government originally received for the whole area upon which the city now stands. The State Bureau of Labour Statistics for Illinois recently gave a most interesting table showing the yearly growth of value in the case of a quarter-acre plot in the business centre of the city.* In 1830, when the population of Chicago was 50, this "quarter-acre of raw prairie land at the mouth of the Chicago River" was worth twenty dollars. In 1894 the population was 1,500,000 and the value of the quarter-acre had risen to 1,250,000 dollars.

The story of Leeds and of Chicago is repeated, on a still larger scale, in London. The rise of land values in the metropolis has not been so rapid as in the case of Johannesburg, and its stages are not so fully recorded as in the case of Chicago, but the causes are exactly the same. Early in 1897 the Valuer to the London County Council prepared an estimate of the land values of the metropolis. He excluded exactly all parks and open spaces, and (by an average calculation) the areas occupied by streets. He says:—

> I think I should point out that my aim has been to arrive at the present annual value of the land in each area, subject to existing conditions. I have not taken into consideration the possibility of enhancement of value owing to the formation of or widening of streets; nor the better utilisation of land at present encumbered by existing buildings; nor the dormant element of building value in land now used for agricultural purposes. In outlying districts land which is ripening for building is taken practically at agricultural value; while building land not developed to its fullest extent is not valued according to its capacity, but according to the use now made of it.

* Eighth Biennial Report (1894). Second Edition (1896), p. 277.

Readers of Mr. Billson's paper in last year's "Annual" (since republished as a penny pamphlet by the Liberal Publication Department, Parliament Street, Westminster) will readily understand the importance of these reservations, the effect of which is that London land values are considerably understated in the Valuer's Report. Yet, even so, his total comes out at the enormous figure of £15,096,620—an annual value equal to about 6s. 6d. per week from every family in the metropolis.

Considerations of space forbid a detailed inquiry into the causes which have helped to build up this value—to convert land which was once a forest-girt marsh sloping to the lower reaches of the Thames into sites which sometimes sell at the rate of nearly two and a half million pounds per acre.* An attempt to work out the history of London land values in some detail was made a few months ago in a series of articles in a London evening paper.† Briefly, London land bears an enormous value, mainly (1) because its position on a convenient tidal river marked it out as a natural centre for the trade of a seafaring people, and so attracted to it a large commercial population; (2) because the national Government established its legislative, administrative, naval, military, and judicial headquarters there; (3) because its municipal authorities have spent millions of public money, and have incurred a large debt, in draining its site, improving its highways, providing parks, &c.; (4) because the political and commercial capital naturally became the railway and market centre also. In the pamphlet just referred to, facts and figures are quoted which prove that the advantages conferred upon London by the expenditure of the rates in forming new streets, embanking the Thames, building new bridges and freeing old ones, making tunnels under the river, opening new "lungs," constructing a costly system of main drainage, providing Board Schools in every district, and public libraries, baths, and washhouses in many, have expressed themselves in terms of increased land value. The South London tramway system was municipalised on New Year's Day, 1899, and some improvements, including an all-night service, have been introduced by the London County Council. Already the advantages thus conferred upon the population south of the Thames have been heavily discounted, if not entirely absorbed, by an increase of rents in the working-class districts.

We are now in a position to understand what Adam Smith meant when he said that "ground rents, so far as they exceed the

* *Co-operative News*, June 13th, 1896.

† Since reprinted as a penny pamphlet. *Echo* Extras, No. 1. "The Great Problem of our Great Towns." 22, Catherine Street, Strand, London, W.C.

ordinary rent of land, are altogether due to the good Government of the Sovereign." Of course, the word "Government" must here be taken in its widest sense, to include all those developments of local self-government which have been such a marked feature of our history since Adam Smith's time. Indeed, so great has been the increase of land values in the great self-governing towns during the past few generations that we are in danger of overlooking the share which the "Government of the Sovereign" has had in that increase, and are often tempted to regard it as almost entirely the work of the municipalities.*

In the case of some towns the increase of land value, and, in some cases, the very existence of the town itself, is obviously due, in the main, to the action of the Central Government. The growth of places like Chatham, Portsmouth, and Plymouth is due to the establishment of great works by the Admiralty. Enfield and Woolwich owe their increase of population and of land value largely to the establishment of Government Arsenals there; Deptford to its Naval Victualling Yard; Westminster, and West London generally, to the removal of Parliament and the Court from Winchester to the banks of the Thames.

The discovery of a new public utility in the land of Salisbury Plain immediately led to a large increase in its value, as evidenced by the price which the Government had to pay for that part of the Plain which they purchased for a manœuvring ground, and by the demand of Sir Edmund Antrobus for £125,000 for his adjacent Stonehenge estate. There is no doubt that the concentration of soldiers and the influx of visitors during the manœuvres will add to the value of the neighbouring land exactly as the summer rush of visitors to the seaside increases the value of land at every popular watering place.

The Thames-side village of Woolwich grew into a great and busy town because of the establishment of the Government Arsenal and Dockyard. The population attracted by these State-created opportunities for employment has caused almost every available yard of space to be built over, and is rapidly covering the adjacent marshes of Plumstead with houses. The result has been, of course, an enormous increase in the value of land in and around Woolwich. The expenditure of the local rates by the Local Board of Health on the improvement of the town has maintained and accelerated this increase. The establishment by the London

* The conquest of Cuba by the United States has already had the effect of increasing land value (*Daily Chronicle*, March 29, 1899), because the introduction of a more settled form of government makes possible the increase of population, the extension of industry, and the accumulation of wealth.

County Council of a free ferry* across the Thames from South to North Woolwich, and the acquisition of Bostall Wood, close by, as a public park, have had the same effect.

The ground landlords of Woolwich, therefore, owe their increased incomes largely to the action of the State and of the municipality—those great co-operative organisations through which the people act, always imperfectly, often unconsciously, for the common weal. The result, viz., that the profits go to the landholders, is just the same when the State or municipality delegate some of their co-operative functions to smaller corporations, such as railway or tramway companies. While the older means of communication still remain "the Queen's Highway"—made, owned, maintained, and controlled by public authority—the newer high roads, the railways, have been made and are, at present, owned, maintained, and operated by private corporations, under the sanction and control of the State. London and some other towns still allow the supply of water and gas to be undertaken for them by joint-stock companies. But, whether the community does its own work or "puts it out," the result is just the same. The land agent who wishes to sell land quotes the abundant supply of pure soft water, the excellent railway service, just as he quotes the good roads, perfect drainage, excellent schools, &c., as reasons why the landlord should get a high price for the land.

Nor, when co-operation is limited, definite, and conscious, are the results different, if the benefit be definite and general. The success of the local trade unions in getting an increase of wages resulted, both at Woolwich and Deptford, in a general increase of rents; for the benefit was fairly general, owing to the fact that so large a proportion of the workers were in Government employment.†

* In buying eleven acres of land at Woolwich for an open space the value was increased by £3,000 because a free ferry had been established at the ratepayers' expense.—The late William Saunders, M.P., L.C.C., "The Land Struggle in London" (1891), p. 13.

† Replying to a demand for higher wages for the labourers in Deptford Victualling Yard, Mr. Goschen (House of Commons, April 14th, 1899) said "that if it were consistent with proper administrative principles to make an advance of the wages of these labourers he would cheerfully do so. But there was a larger question than that of the amount involved, which was infinitesimal. If the position of the labourers at Woolwich and Deptford was as described, it was rather due to sweating landlords than to the rate of wages. The wages had been raised 20 per cent in the last ten years, and the house rents 50 per cent. It was constantly the case in those districts that the increase of wages only led to a larger sum going into the pockets of the landlords, and he was even told that some of the men who were locally the loudest in the cry for justice to the labourers were owners of cottage property, who would benefit if the wages were raised."—*Standard*, April 15th.

A general economy in expenditure operates in the same way as a general increase of earnings. Mr. Ben Jones,* of the London Branch of the Co-operative Wholesale Society, has placed it on record that the successful work of the Royal Arsenal Co-operative Society "made the property around much more valuable, and it was the only cause of that property being made much more valuable;" and we have the testimony of a Woolwich clergyman that "rents are higher within a distance that a man can walk home to his dinner from the Arsenal." He gets his mid-day meal cheaper, but he has to share the saving with the landlord. The competition for houses near the Arsenal or the Store translates the advantage of living in the better positions into land value, and ultimately into ground rent.

It will be noted once more that the landlord, as such, does not appear as a prominent or active agent in the creation of land values. His function is rather to receive them. So far as he is concerned, the successive increments of value of which his rent has been made up are "unearned." In no other sense can we speak of "unearned increment;" for every penny of it is earned—by the public. Thirty years ago Prof. J. E. Thorold Rogers defined the position of the landlord in an often-quoted paragraph:—

> Every permanent improvement of the soil, every railway and road, every bettering of the general condition of society, every facility given for production, every stimulus supplied to consumption, raises rent. The landowner sleeps, but thrives. He alone, among all the recipients in the distribution of products, owes everything to the labour of others, contributes nothing of his own. He inherits part of the fruits of present industry, and has appropriated the lion s share of accumulated intelligence.†

Many years earlier Patrick Edward Dove had suggested the same idea in a single forcible sentence:—

> If, in the heart of London, a space of twenty acres had been enclosed by a high wall at the time of the Norman Conquest, and if no man had ever touched that portion of soil, or even seen it from that time to this, it would, if let by auction, produce an enormously high rent.

So complete and so complicated is the interdependence of one member upon another in that great co-operative institution, the modern State, that it is practically impossible to define accurately

* Select Committee on Town Holdings, July 5th, 1887.

† "Political Economy," Chap. XII. Prof. Rogers here gives a hint of some considerations which have, perhaps, not yet been sufficiently worked out by economists. It is pretty clearly understood that a general improvement of efficiency in production crystallises into land value, and that a *material* "bettering of the general condition of society," *e.g.*, by the raising of wages (trade unionism), or by an economy in expenditure (distributive Co-operation), does the same thing. But we are not yet in a position accurately to estimate the effect of mental and moral "betterings" on land values, although they undoubtedly lead to material improvement. The work of the Educational Committee of a Co-operative Society, or of a School Board, would obviously be covered by the quotation from Thorold Rogers.

the share which any one class or locality has in the creation of local land value. It is quite certain, for instance, that the people of London are not entitled to the sole credit of London land values. London land is made valuable by the presence of the Government headquarters and because of the concentration of commerce within the area of the metropolis, as well as by the activity of the County Council. But the whole country contributes to the cost of maintaining the Government and its offices, and the customers upon whom the London shipper and merchant depend are to be found in every town and village in the kingdom. The presence of the High Courts of Justice in the Strand gives a special value to sites in the Temple and other neighbouring quarters where lawyers most do congregate, but the laws which are there administered run to the remotest hamlet.

The taxpayers all over the kingdom who help to maintain the "Royal Parks" in London are also helping to keep up the extravagant cost of sites in Park Lane, where the South African millionaire delights to build his palace. Although the British Museum is most easily accessible to Londoners, and has its special effect upon the rent of lodgings in Bloomsbury, the benefits of its reading-room are placed, by the printing press, within the reach of every student and newspaper reader in the kingdom. Portsmouth, Dover, Plymouth, Woolwich are specially affected, as to their land values, by the immediate presence of great works of naval defence, but the land values of Hastings and Brighton also owe something to the presence of the Channel Squadron. The agricultural labourer in a remote country village may never have travelled beyond the bounds of his own parish; but, as he goes about his farm work, or spends his earnings in the village shop, or smokes his pipe after his daily toil, he is contributing something by his labour, his expenditure, and his taxpaying towards the causes which make London land a thousand times more valuable than the most fertile of his native fields. The value of land in a country market town depends upon the labours of the agricultural population in the surrounding villages, and every village grocer is a link in the chain which connects the agricultural labourer with Mincing Lane, and helps to make land valuable in the neighbourhood of the London Docks. It would be as idle to credit the whole of the increase of London land values to the activities and expenditure of those who live in London as to claim for the Co-operators of Manchester, London, Glasgow, and Newcastle the whole of the profits of Co-operative wholesale trading because the chief offices happen to be situated in those cities; for it is in the widest sense of the words that land values are created *by the people*. The material results of all our national and local co-operation inevitably express them-

selves in terms of land value. A house facing a public park will command a higher rent than a house of exactly similar build in a back street. A shop with a frontage to a main road lets for more than a similar shop in a less busy thoroughfare. A four-roomed cottage in a busy town commands a rent many times greater than that of as good a cottage in a rural district, where opportunities for labour are small and municipal conveniences almost non-existent. In all these cases the difference of value attaches to the site and not to the building. Thus, the man who pays the higher rent is already paying for the advantages which the "Government of the Sovereign" places within his reach, and is paying in proportion to his share in those advantages. He is paying for them in exactly the same way as the tenant of a fifth-floor in a large block of offices pays for the convenience of the common lift, viz., in an increase of rent proportionate to the convenience which the use of the lift offers him. But, unfortunately, he is paying his rent, not to the "Government" which has rendered him the service, but to the landlord.

The extraordinary fact emerges from our inquiry that there is in full operation here and now a system of taxation which accurately measures the value of the benefits which each locality and individual receives from the State, and that this tax (usually called "economic rent" or "land value"), instead of going to the State, is treated as the private property of a favoured section of the community. It is only necessary to convert this private tax into a public one, and to abolish the present public taxes, in order to arrive at a system of taxation based upon justice. The community should itself collect the price paid for the benefits which itself confers. This is what is meant by the taxation of land values: "The abolition of all taxes upon labour, and the products of labour, and the earnings of labour, and the increase of taxation upon land values until the whole annual value of land is taken in taxation for public purposes;" or, in other words, the adoption of land values as the basis upon which both taxes and rates shall be levied.

III.

The enormous growth of municipal expenditure during late years has given to the vexed question of the incidence of local taxation a great and increasing importance. It is a question upon which popular opinion is directly at variance with the opinion of most experts, and upon which experts differ among themselves.

The view almost universally adopted by occupiers of houses, and by Progressive candidates who appeal to their suffrages at

elections, is that the rates are a burden upon the occupiers of buildings in addition to the full rent, and that the "landlord," who receives the rent, pays none, or practically none, of the rates. From this point of view the taxation of land values is advocated as a measure for directly affording "relief to the occupying rate-payer."

On the other hand, many economists, nearly all surveyors, valuers, and estate agents, men of vast practical experience in questions of value, assessment, and rating, like the Statistical Officer and the Valuer and Assistant Valuer to the London County Council, maintain that rates really come out of "rent," *i.e.*, out of land value. "The economic value of premises is not rent only, but rent *plus* rates, from which it follows that the owners of rent pay all rates."*

It is only necessary to consider the two extreme theories. (1) If it be true that the occupier pays the full annual value of land and house, and, in addition, the whole of the rates, the injustice of the present system stands naked and unashamed, for no one would now seriously defend a proposal that the occupier should pay the full value of the site which he occupies, and at the same time bear the whole expense of making and keeping that site valuable, while the landlord pays nothing at all. If this theory

* Report by Statistical Officer of London County Council on "New Sources of Revenue," 1897. Mr. Sidney Webb (Town Holdings Committee, 1890, quest. 35, ff.) holds that, according to economic theory, "in a state of perfect competition, where there is no economic friction, and in the long run all imposts levied in proportion to the rent of natural advantages, unimproved land, fall upon the owner," and that "the rate on buildings falls in the same way as the rate on land, that is, upon the owner, or would conditionally on the absence of economic friction," but that "the economic friction, in the opinion of economists, eats away the theory;" and that "it really does not in actual life do anything of the kind in either case." John Stuart Mill ("Political Economy," 8th edit., Book V., ch. iii.) held that "a tax on rent [land value] falls wholly on the landlord." But "the rent of a house consists of two parts, the ground rent and . . . the building rent. . . . A tax of so much per cent on the gross rent falls on both these portions alike. . . . As much of it as is a tax on building rent falls on the consumer, in other words, the occupier. . . . As taxes on rent, properly so called, fall on the landlord, a tax on ground rent, one would suppose, must fall on the ground landlord, at least after the expiration of the lease," but not "unless with the tax on ground rent there is combined an equivalent tax on agricultural rent." That is to say, on the whole and in the long run, a tax levied on all land, according to its value, falls on the landlord, and a tax on the value of houses, apart from land, on the occupier. Professor Seligman ("On the Shifting and Incidence of Taxation") believes that "when the local real estate tax is levied according to rental value and assessed in the first instance on the occupier, as is the case in England, the main burden of the tax will rest ultimately on the occupier, not the owner of the premises."

could be proved to be in accord with the facts, the argument for the taxation of land values would be simple and irresistible. But we know (2) that there is a large body of economic and professional opinion which favours the view that the rates really fall, or at least have a strong tendency to fall, on land value. There is so much to be said for this view that it at least calls for a careful analysis. It must be premised, however, that no one alleges that the rates come out of the sum which the landlord receives as ground rent. The argument is that the incoming tenant takes into account the amount of rates which he will have to pay, and offers a smaller rent in consequence. This, as it were, throws the burden of the rates back upon the builder of the house; but he has already taken the rates into account in fixing the amount of the ground rent which he is willing to pay to the freeholder, upon whom the burden thus ultimately falls. If all the municipal services went on as usual, and there were no rates, he would get a ground rent just so much the greater.

Consider the case of a new house in a London suburb. The ground rent (which may be supposed to represent very nearly the present net annual value to the freeholder) is £7. The house is worth £30 a year, apart from the value of its site. The occupier pays £37 in "rent," and is assessed at £30, upon which he pays rates at 6s. 8d. in the £, *i.e.*, a total of £10 in rates. According to the popular theory the full value of the land is £7 a year, which the occupier pays, in addition to the value of the house (made up of interest on cost of building and of annual cost of insurance and repairs) and the whole of the rates. But, according to the theory which is now under discussion, the true annual value of the land is £17, and if the landlord undertook to pay the rates he would get £17 for it in ground rent. As the building agreement provided that the builder (or his tenant) should pay the rates, and it was foreseen that there would be a demand for £10 a year in rates as soon as the house was occupied, the freeholder could only get £7 net. Whichever theory be correct, there is no disputing the fact that the occupier pays a total sum of £47 a year for permission to occupy the premises, and it is difficult to resist the conclusion that competition would compel him to pay £47 a year even if (*other things being equal*) the landlord paid the rates directly.

There is reason to believe that the practical truth lies between the two economic extremes. There is an undoubted *tendency* for the rates to fall upon the value of the "property," and ultimately upon the value of the site. If the rates were assessed upon land value, that tendency would probably be made effective, even if the rates were collected, as now, from the occupier. As it is, the economic tendency is disguised, especially in London and some

other towns, by the working of the leasehold system; hindered by the fact that "ratable value," and not land value, is the basis of rating; and frustrated, in the case of those properties, urban as well as rural, which come within the operation of the Agricultural Rating Act, by the transfer of half the burden of the rates to the Imperial Exchequer.

If, as has been shown, the benefits conferred by Government are measured by land value, it becomes clear that ratable value is not a just basis of local taxation, for ratable value consists of land value *plus* the value of buildings and other improvements, *minus* certain deductions allowed by statute. Moreover, unoccupied property, no matter how valuable, is usually discharged from assessment and pays no rates. Ratable value is calculated from "gross value," which is defined, in the case of London, as meaning—

> The annual rent which a tenant might reasonably be expected, taking one year with another, to pay for an hereditament, if the tenant undertook to pay all usual tenant's rates and taxes, and if the landlord undertook to bear the cost of repairs and insurance and other expenses, if any, necessary to maintain the hereditament in a state to command that rent. (Metropolis Valuation Act, 1869, s. 4.)

A maximum deduction of one-fourth is permitted where the gross annual value does not exceed £20; of one-fifth up to a gross value of £40; of one-sixth where the gross value exceeds £40. Thus a house for which a tenant might reasonably be expected to pay £20 a year is assessed at £15; £35 a year at £28; and so on. The deductions here mentioned, although generally adopted, are the *maximum* deductions allowed by the Act, and are supposed to represent the average annual cost of repairs and insurance. In every case where the land value bears a large proportion to the total value of the property these deductions are excessive, and give an unfair advantage to the owner or occupier; for the land is not a wasting property and entails no charge for repairs, but is, on the contrary, usually being increased in value by the growth, industry, and expenditure of the surrounding population.

Moreover, when land suitable for building within an urban district is still used for agricultural purposes it is assessed, not upon "the annual rent which a tenant might reasonably be expected to pay" for building purposes, *i.e.*, upon the value which the community has conferred upon it, but upon the rent at which it is letting for agricultural uses.

The inclusion of building values with land values as the basis of assessment to the local rates destroys all relation between the amounts paid for the benefits of local government and the standard

by which alone those benefits can be measured. The following table is based upon actual cases in London, recently quoted before the Royal Commission on Local Taxation by the Assistant Valuer to the London County Council; the figures, for convenience of comparison, being reduced to terms of £100 worth of "gross annual value":—

	A Net Land Value.	B Net Building Value.	C Allowance for Repairs, &c.	D "Gross Annual Value."	E Rates (County and Parish).
	£ s.	£ s.	£ d.	£ s.	£ s.
Central London	70 14	12 14	16 12	100 0	22 4
„ „	67 10	15 18	16 12	100 0	22 14
„ „	51 16	31 12	16 12	100 0	21 12
Inner Suburb	38 4	45 4	16 12	100 0	23 4
„ „	29 14	53 14	16 12	100 0	24 0
„ „	25 8	58 0	16 12	100 0	22 0
„ „	20 0	63 8	16 12	100 0	22 14
Outer Suburb	15 18	67 10	16 12	100 0	25 0

NOTE.—Column "A" gives net land value. The full economic value of the land according to the theory under discussion, *i.e.*, ground rent (net land value) *plus* rates, is the sum of cols. "A" and "E." Column "B" gives net building value, *i.e.*, letting value of house (not including ground rent) *minus* cost of insurance and repairs. Column "D" corresponds to "gross value" (as defined by the Valuation Act), which includes cost of repairs and does not include rates. "Ratable value" = col. "A" + col. "B," or col. "D" − col. "C," and may be taken in each case as £84, odd shillings being neglected in practice.

The advantages of position, *i.e.*, the respective shares in the benefits of government conferred by the occupancy of each site, are represented by the land value, *i.e.*, by the greatly varying figures in col. **A**; or (on the theory that land value = ground rent + rates) by the greatly varying figures made up by adding col. **A** to col. **E**; but the ratable value is the same in all the cases, and the rates, although they vary within narrow limits (owing partly to differences between the rates in different parishes, and partly to the exemption of "the City" from certain county rates), bear no proportion whatever to the variations of site value. If the rate in the £ could be completely "equalised" for all London parishes the figures in col. **E** would become uniform, but the burden of the rates would not thereby be equalised in any true sense, for it is not an "equal" arrangement to be compelled to pay the same amount of money for widely differing values of service. The true method of "equalising" the rates is to make them equally proportional to land value.

When we pass from occupied premises to unoccupied land, the injustice of our present system becomes very plain. Keeping well within actual London figures, let us take an acre of land in one of the growing outer suburbs. The land is at present unbuilt upon, although there is a great demand for houses in the locality, because the landowner is waiting till he can get from some builder a price, or a ground rent, at which he thinks it would pay him to sell or let the land. The land may be absolutely unused, and in this case it will, in many parishes, be excused from rating altogether, on the ground that there is no "beneficial occupation;" or it may be used for grazing purposes and assessed at, probably, £3 or £5; or as a market garden with a somewhat higher assessment. On the assessment the "owner" pays six shillings in the £ as rates. Although the landlord's contribution to the rates is very small indeed, and may be nothing at all, the benefits which he derives from the expenditure of the rates are very large, for the provision of urban conveniences—sewers, public lighting, Board Schools, public baths, and so on—is converting his agricultural land into building land, with a large selling value which is increasing every week, and which he can realise any day by putting his land on the market.

The benefit is none the less real because he derives only a small present income from the land. If he chooses to let the benefit accumulate in the land as in a savings bank, he is nevertheless receiving it all the time. By and by he finds a builder who is willing to take his acre of land on a building lease at a ground rent. The builder cuts up the acre into twenty plots, paying a ground rent of at least £5 per plot, and spends, say, £300 each on building twenty houses, which he lets finally at £29 per house (= £5 ground rent + £18 interest on £300, spent in building, at 6 per cent, + £6 for insurance and repairs). The local authority assesses each house at, say, £24, and levies rates, say, at six shillings in the £ (= £7. 4s.).

Now, on the theory that rates are a deduction from land value, the builder, who pays £5 a plot, would, if the landlord paid the rates directly, have been willing to pay £12 a plot, and would have been able to do it without trenching upon his own trade profit—the land is worth £12 a plot, or £240 per acre per annum.

The next acre to it is not yet built upon, because the continued demand for houses has encouraged the freeholder to stand out "for the rise." But it is equally worth £240 gross, or £100 net, because of the benefits which it derives from the expenditure of the rates, and, if let on lease for building, would yield its owner at least £100 net in ground rent.

A JUST BASIS OF TAXATION.

Let us compare the two acres, each equally benefited by "the good Government of the Sovereign."

	Net Land Value.	Net Building Value.	Total Letting Value.	Ratable Value.	Rates Paid.
	£	£	£	£	£ s.
Acre unbuilt upon	100	—	—	5	1 10
Acre built upon	100	360	580	480	144 0

There is no question upon which greater unanimity of opinion exists in London than upon the desirability of increasing the provision of houses for the people; yet here we have the conversion of an acre of bare land into an acre of houses penalised, owing to the present unjust basis of local taxation, by an increase of rating from £1. 10s. to £140 a year!

Suppose, on the other hand, that land values were substituted for ratable values as the basis of local taxation. We can estimate the effect of this by assuming, first, that all the present rates are abolished. The true value of the land already built over will then plainly appear as £240, at which it will then be assessed. But the neighbouring acre is, *ex hypothesi*, of the same value. If, then, the new rates, based upon land values, are imposed, each of the estates would be assessed upon its value £240, and would yield an equal amount to the rates. But the "owner" of the acre of bare land, who has been holding it back from the building market till he can "get his price," having no income out of which to pay his rates, would be forced either to build on the land or to let or sell it to someone else for building purposes; and, when built upon, there would be no increase of rates in respect of the buildings. The ring fence which our present rating system draws round a growing town would be broken through, and the terrible housing problem would be placed in the way of solution. Moreover, the bringing into the market of a virtually new supply of building land would, by competition, bring down the cost of land both to builders and occupiers, and tend to cause a reduction of rents all round. Some such idea was evidently present in the minds of the Royal Commission on the Housing of the Working Classes when they reported in favour of assessing vacant land "at, say, 4 per cent on its selling value."*

The adoption of land value as the basis of taxation and rating would mean much more than a mere fiscal reform. The enthusiasm

* First Report (1885) p. 42. The following Commissioners dissented from the proposal: Lord Salisbury, Mr. Goschen, and Sir R. A. Cross.

with which it is advocated is inspired by the belief that it gives the master key to most of the social reforms for which thoughtful citizens are agitating. It would do justice to the whole community by taking for public purposes those values which the public creates. It would get rid of the social injustices which our present system of taxation inflicts upon poor men, poor classes, and poor neighbourhoods. There could be no more complaint of the over-taxation of Ireland, or of the rural districts, or of the east ends of our towns if taxation were proportioned to land values. As all citizens help to create land values, all citizens would share in their benefits if they were taken in taxation for the common benefit. It would then be possible to afford real relief to the agricultural ratepayers without throwing the burden of rural rates on a national Exchequer largely replenished by the oppressive methods of indirect taxation; for, while taxation would be small in rural districts where land values are low, the rural population would benefit by the tapping of the immense land values of the towns, which they help to create. The towns would benefit by the opening up of vacant land to the builder, and the country by the opening up of idle land to the farmer and labourer, under the pressure of a tax levied on the value of the land according to the best use to which it can be put. Thus a great step would be taken towards the breaking down of land monopoly, and of the monopolies dependent upon it, and towards the solution of the housing and unemployed problems. Production and commerce would be stimulated by the removal of the fines now laid upon those who add to the national wealth.

By none should the adoption of a just basis of taxation be more ardently desired and worked for than by Co-operators, for, as consumers, they would benefit more than the average by the abolition of the indirect taxes upon many of the commodities in which they trade; as distributors they would share in the increased demand for goods; and the great hindrance to productive Co-operation would be removed by the reform of a fiscal system which allows and even encourages the land monopolist to levy blackmail upon those who desire to put land to productive use, and which penalises, by heavy taxation, the erection of a store or factory, or of a block of workmen's dwellings.

376 and 377, Strand, London, W.C.,
August, 1899.

For Direct Legislation.

BY ALEX. M. THOMPSON.

THE theory of Government in Great Britain, as Mr. Gladstone stated it in the celebrated Home Rule debate of February, 1893, is that "We are a self-governing people—*i.e.*, a people governing ourselves by our majorities." This theory is the base of all our boasts of liberty: that the body of the nation is the sovereign legislative power, not ruled by others for their interest, but ruling itself according to its own desires and requirements.

There is no question in any British statesman's utterances of the people's fitness to exercise this power. Every candidate at every Parliamentary election admits, upholds, and flaunts the British people's right to self-government. It is the will of the nation, they say, which makes the laws; and it is only the will of the nation which invests the laws with their authority. The masses of the people, we are assured, are distinguished by so enlightened a patriotism, so much good sense, and so comprehensive a fitness for the management of their own affairs that the most eminent of politicians could aspire to no higher distinction than the honour of *their* mandate to act as *their* agent to carry out *their* instructions in Parliament.

That is, unquestionably, the theory upon which our system of Parliamentary Government is based.

If, therefore, it can be shown that the theory is not justified in practice—if it can be shown that our Parliamentary system is not, never has been, and never can be representative of the desires of the nation—if it can be shown that the laws are not the expression of the needs of the mass, but only the assertion of the privileges of the few, it will not serve the champions of the existing system to oppose or confuse that system's indictment by then beginning to discuss the competence of the people to govern themselves.

The power and right of the electors is conceded universally. "It is admitted," said the Hon. H. G. Reid, Premier of New South

Wales, to the Parliament of that colony, "that their yea and nay is to be the supreme power, the final word in the law making of the nation," and it is too late now to go back from that admission. The people's title is no longer in dispute. Even Lecky recognises that "democracy is an inevitable fact."

The only question open to discussion is whether the present system affords the people opportunity to exercise their undeniable right; and if it can be shown that it does not do this, then the next question for discussion is, How can the system be amended to give the fullest possible effect to the admitted constitutional design of democratic government, and to substitute an actual for a merely theoretic sovereignty of the people?

* * * * * * *

To begin, then.

Do the people of Great Britain "govern themselves," as Mr. Gladstone claimed, "by their majorities?"

At the threshold of our inquiry we are confronted by the fact that the legislative power is vested in two Chambers, the one elected and temporary, the other hereditary and permanent.

These two Chambers are not equal. Should the Lower Chamber refuse to accept a legislative proposal sanctioned by the Upper, the recalcitrant body may be dissolved in order that the electorate may sit in judgment upon their decision.

But should the Upper Chamber decline to accede to a proposal submitted by the Lower, the proposal is thereby defeated and destroyed; there is no appeal from the veto of the Upper Chamber, for the Chamber is supreme, and irresponsible to any electors.

It exists, frankly and impudently, to protect the privileges and prerogatives of those persons who compose it. It is, frankly and impudently, a barrier maintained by a few monopolists against the development of the Commonwealth. It has absolutely nothing in common with the general interests, and scarcely troubles to disguise its contempt for the democracy.

To the House of Lords the *vox populi* is not the *vox Dei*, but "a common cry of curs whose breath it hates as reek o' th' rotten fens, whose loves it prizes as the dead carcases of unburied men that do corrupt its air."

The principle of democratic self-government is obviously incompatible with the existence of a body so constituted and possessed of legislative power so interested, so arbitrary, and so uncontrolled. If no more than this flagrant anomaly were provable against our system of government it would suffice by itself to demolish the pretence of the rule of the people, by the people, for the people.

But, alas! that is by no means the only contradiction between our theory and practice of government.

The House of Lords has this, at least, in its favour—that it scarcely pretends to be anything else than what it is.

But the House of Commons affects to regard the "barbarous multitude" on whose suffrages it depends, as the depositaries of the national wisdom, and to harbour no higher ambition than to register and enforce the people's sovereign will; it professes to represent the nation, and to act only in obedience to instructions given by the nation; and it is this pretence which constitutes the most formidable obstacle to true democratic government, because it deceives the people and beguiles even earnest democrats into more or less placid acquiescence in the existing system of government.

For the pretence is only a pretence. The system of Parliamentary representation is a misrepresentation. Our free choice of rulers is a sham.

Look round. Consider. How are our Parliamentary delegates selected?

In the first place, Parliamentary candidates are not chosen by the masses at all, but by coteries of partisans and wire-pullers.

When an election is held a couple of candidates are set up, the one by the Carlton Club, the other by the Caucus, and the free and independent elector must vote, if he vote at all, either for the one or the other.

What are the candidates to him, or he to the candidates? They are drawn from the classes, and know nothing of the lives of the masses. How can he by voting for this professional partisan or that professional place-hunter express and make clear his views on the manifold and diverse issues arising from his daily struggle for existence?

As Carlyle asked—

> What is it to him whether Aristides Rigmarole, Esq., of the Destructive, or the Hon. Alcides Dolittle, of the Conservative party, be sent to Parliament; much more whether the two-thousandth part of them be sent, for that is the amount of his faculty in it? Destructive or Conservative: what will either of them destroy or conserve of vital moment to this freeman? Has he found either of them care, at bottom, a sixpence for him or his interests, or those of his class or of his cause, or of any class or cause that is of much value to God or to men? Rigmarole and Dolittle have alike cared for themselves hitherto, and for their own clique and self-conceited crotchets, their greasy, dishonest interests of pudding, or windy, dishonest interests of praise, and not very perceptibly for any other interest whatever.

It is true that other interests are discussed during the electoral contest, but our Parliamentary system provides no means of

definitely ascertaining the electors' views about them. The system seems designed rather to shirk than to seek a clear electoral mandate. It converts the constituencies, not into discussion forums, nor into a national deliberative council, but into a noisy circus of make-believe party passions, furiously raging about nothing in particular whilst the fight lasts, and simmering down into the most astounding cordiality when no further purpose remains for cozening or distracting the electors.

Professor Goldwin Smith, writing in the *Nineteenth Century* (May, 1899), on our system of elections, describes it as

> The permanent division of the nation into two political organisations, to one of which each citizen is bound through life on pain of being regarded as an apostate to adhere, and which are to carry on a perpetual struggle for the offices of State, each of them assailing and traducing the other with much of the moral bitterness of a civil war, though the theory is that both of them are equally necessary to the operation of the political machine. Such a system appears to me neither rational nor moral, nor do I believe that it can for ever endure. National interests are put out of sight. Patriotism gives way to party. The main question is what effect the particular course will have upon the balance of parties or the possession of power. Fundamental questions are raised, and political revolutions are set on foot, not from a conviction of their necessity, but because a party needs wind in its sails.

The pretence that any expression of the people's desires can be evolved from such a hocus-pocus is manifestly ridiculous.

What "mandate" was issued to the Parliamentary delegates by the electors of 1895? The political leaders have been pretending to look for it ever since, but nobody has found it yet.

All sorts of reasons have been assigned for the defeat of the Liberals on that occasion. We have been told, in turns, that it was due to Mr. Gladstone's Home Rule Bill, to the Liberal attitude on Employers' Liability, to the attack on the House of Lords, to general maladministration, to Disestablishment, to Bimetallism, and to a general desire for change. On the morrow of the election, one Liberal writer declared that it had gone against his party because Lord Rosebery had not manifested a sufficiently progressive energy; and another—the ex-editor of the *Newcastle Leader*—protested that the electors had recoiled in horror from revolutionary politicians who championed such shameful "interference with liberty" as the Eight Hours Day!

Mr. Stead, in the "Review of Reviews," lately said:—

> We are supposed to be a self-governed people. But when and where did the British electors have any opportunity of saying aye or no to the question whether they should be saddled for all time with the immense responsibility of policing and civilising the Soudan, including Darfur and the Bahr-el-Ghazel? If the Unionists who carried last general election had been charged by their opponents with the intention of adding 1,500,000 square miles of African territory to the burden of the British Empire, they would have repudiated the charge as

a calumny. "Is thy servant a dog that he should do this thing?" would have been their cry. Yet they have done it, without a mandate and almost without a protest. If the "sovereign people" had been Russian serfs they could hardly have had less voice in the matter.

Will anybody venture to pretend that the 2,480,524 electors who voted for Tories at the last general election meant to convey to the Government the desire of the toiling democracy for the granting of eleemosynary relief to squires and parsons? Did the Conservative working men design to express a longing for military conscription? How many of the Tory voters of 1895, if directly appealed to on these points, would approve the action of the Government which their votes brought into power? And what about the 2,376,710 voters who voted for Liberals in 1895?—which of the Parliamentary legislative enactments represent their views?

Two notable electoral contests were fought last July in Oldham and St. Pancras. What did they prove? In the one case, two Liberal capitalists triumphed over a Tory Democrat and a semi-Socialist Tory; in the other, a Tory capitalist defeated a semi-Socialist Liberal. What was the democratic "mandate" to be deduced from these elections?

I saw something of the St. Pancras struggle in passing to and fro through the constituency, and I confidently declare that the most prominent manifestation of the people's sovereign will revealed by the street literature was a protest against the muzzling order! I saw the committee-room of the National Canine Defence League plentifully placarded with appeals to the electors to support the candidate who had promised to take off the dogs' muzzles, and a row of sandwichmen paraded the main streets to demand that the Government should "muzzle all or muzzle none."

After the election the Conservative journals explained the anti-muzzling candidate's defeat by declaring that "he ran as a Roman Catholic candidate," and "wanted the Church disestablished in the interests of the Church of Rome."

What, then, was the successful Tory candidate's mandate? To help the Government to muzzle dogs and Roman Catholics? It needs no great stretch of imagination to conceive of fervent Protestants voting against a Radical candidate on account of religious prejudice, though they might be strongly in favour of Old-age Pensions and half a dozen other measures which he advocated. What became of the people's mandate then?

I have known a number of fervent teetotalers to support a candidate whom they declared the sounder champion of their especial legislative hobby, though they differed with him on every other question.

It is impossible that any delegate should truly and completely represent the desires of ten or twenty thousand electors, for no two human beings are absolutely agreed about everything; and in every election, therefore, electors are driven, in order to express approval of one cherished principle, to adopt half a dozen others which they bitterly disapprove, and *vice versa*.

Then all sorts of eccentric and personal considerations enter into electoral chances. I have known more than one voter to plump for a certain candidate in Lancashire because he had made a big score in a cricket match against Yorkshire. As the Hon. Ed. Batchelor told the South Australian Parliament, "The generous, genial candidate who is a good patron of sport always stands a good chance. People may vote for another man because he is an Irishman, or a German, or a local resident, or because he has secured their sympathy by being persecuted in some way, or because he is sound on the education or the land question, or even because his opponent is too fond of his cups or has been somewhat loose in his morals."

Recognising the hopelessness of any effort to utter an intelligible mandate through so distracting an electoral hullabaloo, a few earnest people, clumsily and unconsciously groping for the principle of direct legislation, have of late years developed a practice of demanding explicit pledges from the candidates on specific points of policy. Thus one section of electors will visit the Parliamentary aspirants to extort a temperance pledge, another to insist on Old-age Pensions, a third to demand a housing scheme, a fourth to clamour for Irish Home Rule, and so on. But even this ingenious plan will not avail to elucidate the electoral confusion, nor to establish the democratic mandate; for experience has shown that, to get votes, candidates are cheerfully willing in a general way to promise anything; but when they arrive in Parliament they vote just as their party leaders direct, in the same sweet old regular style.

The Member of Parliament, it has been observed, is not at all the same person as the candidate.

Says an observant writer in the *New Age*:—

> From the moment he is elected a wonderful transformation comes over him. *The electors have parted with their sovereignty, and he has secured it.* He work for the community? Not much! He expects the community to work for him. If he is a political "top-sawyer," he looks for place, pension, and title. If he is a lawyer, he has an eye to briefs, recorderships, and judgeships. If he is a "guinea pig," he is after company directorships. If he is a brewer or sweating soap-boiler, his M.P.-ship will get his vulgar wife and daughter into the "Society" which they covet. If he is a landlord, he has his rents to safeguard. If he is a British working man, he ceases to work and lives mysteriously, but well. In a word, too many of our "Elected Persons" have an axe to grind.

Should the member be reproached with his neglect to fulfil this or that promise, he either denies that he ever made it (diplomatic ambiguity's artful aid always leaves an opening for that expedient), or he complacently points to the impossibility of doing anything until his party leaders shall have decided to accept the principle. As for other questions that may arise in Parliament, nothing is easier than to repudiate the receipt of determinate instructions from his constituents; for who could pick out amidst the confused chaotic hue and cry of a contested election the definite mandate of the voters?

Observe now how this confusion of issues may, and assuredly does, affect the legislative result.

It must be conceded, I think, that such confusion necessarily affects the Progressive electors much more than the Conservative. The object of merely defending the actual order of things cannot possibly divide the electors as does the infinitely varied multiplicity of proposals to change. The Progressive forces are divided on a legion of suggested remedies for social ills. Differences of opinion as to Home Rule for Ireland, Local Option, the Eight Hours Day, &c., &c., are causes endlessly productive of party confusion and electoral entanglement.

In London, at the last general election, a multitude of local labour questions split the Progressive vote; in Scotland, the Irish question detached a number of earnest Radicals from the cause of reform; in Wales, the Disestablishment controversy worked havoc in the Radical ranks.

Now, in a perfunctory survey of electoral results in these three geographical divisions of the country, I find the following amongst the list of Conservative successes:—

LONDON.

	Cons'tive Majority.		Cons'tive Majority.
Bethnal Green	160	St. Pancras (East)	289
Camberwell (North)	693	,, (North)	211
Finsbury (East)	270	Shoreditch (Haggerston)	31
Hackney (Central)	312	Southwark (Bermondsey)	360
,, (South)	319	Tower Hamlets (L'house)	590
Lambeth (North)	401	,, (St. George's)	4
Newington (Walworth)	553	,, (Stepney)	472
,, (West)	450		

Total Conservative majority in 15 Metropolitan Constituencies } 5,115

SCOTLAND.

	Unionist Majority.		Unionist Majority.
Ayr District	335	Dumbarton	33
Glasgow (Camlachie)	701	Inverness	100
,, (St. Rollox)	361	Kirkcudbright	170
Inverness	250	Lanark (South)	230
Kilmarnock	381	Peebles	54
St. Andrews	196	Perthshire	292
Wick District	24	Renfrew	512
Argyll (South)	135	Roxburgh	561
,, (North)	710	Stirling	427
Ayrshire	550	Elgin	128

Total Unionist majority in 20 Scottish Constituencies } 6,150

WALES.

	Cons'tive Majority.		Cons'tive Majority.
Carmarthen District	52	Pembroke District	179
Denbigh ,,	229	Swansea Town	421
Montgomery ,,	84	Radnorshire	81

Conservative majority in 6 Welsh Constituencies } 1,046

To summarise :—

In London	5,115	votes won	15 seats.
,, Scotland	6,150	,, ,,	20 ,,
,, Wales	1,046	,, ,,	6 ,,
Total	12,311	,, ,,	41 ,,

That is to say, that if some 6,200 voters in these places had voted Liberal instead of Tory the Unionist cause would have lost 41 seats, counting on a division in Parliament 82.

And as against this we have constituencies like Romford, where 6,429 electors (presumably thoroughgoing supporters of the Newcastle programme) voted for a Radical candidate without succeeding in securing any representation at all; that is to say that 6,200 voters, voting against the cause of progress because of conscientious objection to perhaps some one clause in the Progressive party's avowed programme, make a difference of 82 votes in a House of Commons division; whilst 6,429 other voters, solidly unanimous in favour of the Progressive programme, leave absolutely no mark at all upon the count of Parliamentary representation.

But if we enter upon the wide domain of anomalies and absurdities in the count of our representatives we shall never finish. Mr. Henry Kimber, the Conservative member for Wandsworth, has lately shown in the *Times* that:—

The total of the electors in the United Kingdom being 6,600,283, would on average give to each of the 670 members who constitute the House of Commons an electorate of 9,851.

So far from anything like average equality being attained, however, there is a disparity between the highest and lowest electorates returning one member of 15 to 1—that is to say, Romford, the highest, with 26,731 electors, has 15 times as many as Newry, the lowest, with 1,784 electors. The member for Newry has an equal voice and vote on Imperial and English questions as the member for Romford.

Taking for convenience the average at 10,000, the constituencies of under 10,000 electors are in number a majority and are represented by a majority of members, 351 in number, representing on average only 7,222 electors each, and in total a minority of 2,535,228 electors.

The constituencies over 10,000 electors are represented by a minority of 319 members, but they represent on average 12,743 electors each, and in total a majority of 4,065,061 out of the total of 6,600,289.

Therefore a minority represent a majority and *a converso*. Putting it otherwise, the power of the country rests with the minority of the people's electors, the majority of representatives being elected by that minority. Truly minorities in this case may be said to be well represented.

The old saying "Wisdom resides with the minority" would seem to have here a most curious application. To which minority, electors or members, shall we allow the wisdom?

As the *Times* remarked in a leader on Mr. Kimber's figures:—

Two-thirds of the members of the House of Commons are returned by one-half of the electors, and one-third of the members by the other half of the electoral body. . . . No one would openly defend some of these differences, which are a legacy from times when population was distributed very differently from what it is now, and when the opposition of particular interests was bought off by concessions to favoured localities at the expense of others.

As to the remedy, the *Times* confesses the enormous difficulty, the almost impossibility, of a fair distribution. The leader writer says of Mr. Kimber's scheme of redistribution:—

Pass such a scheme, and disproportions as great as those which he mentions may quickly reappear. One can conceive a Minister saying, "I will not face the odium of passing a measure which would at once deprive this or that constituency of a single member. The struggle will be bitter even if the case for disfranchisement were strong." Many will be reluctant to pass a Redistribution Act which will be the preface to another and yet another.

After the last general election it was pointed out that while a majority of about 200,000 only gave the Liberals a majority of 40 seats in 1892, a surplus of about 100,000 votes gave the Unionists in 1895 a majority of 152.

The Liberal party and its allies polled 49½ per cent of the total vote at the last general election, and got 38⅔ per cent of the

Members of Parliament. The Conservatives and their allies polled 50½ per cent, and got 61⅓ per cent of the Members. A majority of 37,000 in nearly five million votes, or less than 1 per cent, gave the Conservatives a majority in Parliament of 152 in a total of 670 Members.

Mr. G. T. Sadler showed in a letter to the *New Age* that the great army of stay-at-home voters who despair of accomplishing anything by the representative system—the people who very justifiably ask, "What is the use of voting? It won't make any difference"—numbered 1,100,582 out of a total electorate of 4,682,698. Out of an adult population of twenty millions, only three and a half millions voted.

No wonder that the absurdity of such mock "representation" causes grave disquietude among the quidnuncs! Mr. Leonard Courtney, writing about the general election in the *National Review*, said:—

> The bare fact of experience is enough to demonstrate the utter untrustworthiness of our electoral methods. What a jolly awakening there will be some few years hence, when the inevitable argument of experience will show us a nation contradicting itself through the voices of its chosen representatives.

The "waste" of votes in excessive majorities is over 30 per cent, and would be much more if uncontested elections could be taken into account!

Is it possible to conceive a more illogical, futile, or idiotic system? Would it be possible to devise any system to make confusion worse confounded? Enormous stir of rancorous madness, riotous waste of money, and profligate outlay in lying—after which a minority of voters may actually elect a majority of representatives, and it shall be utterly impossible for human reason to discover anyhow what the electors thought they were voting about!

"Representative!" Parliament represents the British people about as fairly as the Czar of Russia represents the founders of the Christian religion.

Our Representative House represents sometimes the predominance of the landed and sometimes of the financial interests, but never the interests, the aspirations, and the opinions of the masses; for it is impossible in the nature of things that the general interests of the people should be represented by particular interests which are diametrically opposed to them. A writer in the *Investors' Review* pointed out after the last general election that:—

> The House of Commons embraces 670 Members, and we find that 264 of them, or 39·4 per cent, are members of boards of directors. This is a smaller proportion than might have been expected, but still a sufficiently large one to be of great importance in determining the character and moral standpoint of

Parliament as a whole. And its significance is enhanced by analysis. These 264 individuals, for example, help to direct no less than 667 different companies, and that although 111 of them are members of one board only. It follows that "guinea pigging" must prevail to a considerable extent among the remaining 153 men who divide the other 556 companies among them. And it does, although it is difficult, perhaps, to say just where fair and honest company-directing ends and the profession of the "guinea pig" begins. Proceeding with our analysis, we find that 61 Members of Parliament have seats on 2 boards, 40 on 3, 15 on 4, 17 on 5, 8 on 6, 4 on 7, and 3 on 8. Then follow five individuals whose directorial labours embrace no less than 69 companies. One sits on 9 boards, 1 on 10, 1 on 14, 1 on 16, and 1 on 20. This is magnificent.

And so it is. Fancy the director of twenty money-spinning enterprises—matchmaking, lead-glazing, chain-forging, and chemical works—looking after the interests in Parliament of the sweated, slum-dwelling victims of phossy jaw and lead poisoning!

As recipients of rents, royalties, interests, and dividends, some 600 of the representatives of the people in the House of Commons are parasites upon the people's backs; and because they, from old time, have held certain parchment scrawls conferring upon them, under laws which the producers had no voice in making, rights of ownership in things, some of them not yet existent—things which labour will produce to-morrow, next week, next year, or a hundred years hence—they cry out that they are being robbed if a term, a distant future term, to their exactions is suggested. Their interest is opposed always and inevitably to every social reform, for social reform must tend necessarily towards equalisation of social opportunity, and equalisation of social opportunity can come only through the curtailment of the prerogatives and monopolies enforced by privileged classes against the masses.

The workers, the great mass of the people, have less than a score of men of their own class to represent them in the one House which is open to them—the House which is amusingly described as the Popular Chamber.

The railway shareholders have seventy-eight representatives; the railway workers, nearly 400,000 strong, have not one. One hundred and eighty thousand landed proprietors have 155 members; a million agricultural labourers have one. Coal mine owners have twenty-one, and 655,000 miners have seven members. The ship-owners and builders have twenty-two representatives; the two hundred thousand sailors have one.

The practical upshot, then, of our "self-government by our majorities" is that, after infinite turmoil, excitement, and cost, we get one controlling Upper Chamber consisting of 636 undisguised opponents of social reform, and another, a Lower House, in which more than 600 out of a total of 670 members are equally interested in hindering and delaying progress. Can we

wonder, then, that the redress of social wrongs and the uplifting of the masses out of their moral and physical bogs proceed with such heartbreaking slowness? The eyes of the people are opened to the sores that afflict the body politic, and the conscience of the nation is aroused. All parties are agreed that "something must be done," yet nothing is done. Why? Is not the reason obvious enough?

Some few of our honourable and right honourable legislators are so kind—and some of them so cunning—as to caress and cajole their bearers—or supporters, as they prefer to call them—and even to express sympathy when the latter pant and groan more than usually under their heavy burdens; but the honourable and right honourable gentlemen have never yet, of their own good graciousness, manifested any legislative hurry to get off those tired bearers' backs. And, with all my faith in altruism, I do not think that, of their own accord, they ever will—though, like the elder Beecher, I strive to hope on and to pray: "O Lord, keep us from despising our rulers; and, Lord, keep them from behaving so that we can't help it."

After all, they are not to blame. The fault is in the system. So long as the government of the nation is entrusted to a class, so long must the interests of that class be preferred to the interests of the whole nation. And when I hear it suggested that existing social wrongs would be speedily righted if the people's representatives were selected from another class, I, like the cautious Scotchman in the story, "hae ma doots."

In the first place, it will be terribly difficult for the moneyless masses to secure the election of moneyless candidates against the tremendous influence of Moneybags. An effective electoral organisation is a costly luxury to maintain. Returning officers' fees, hire of halls and committee-rooms, billposting, &c., make every contest entail enormous expense. The conditions are in every way favourable to the success of Moneybags. And though, as the Tory *Saturday Review* remarked (April 22nd, 1899), the modern plutocrats "are always ready to turn up the whites of their eyes over the recollection of pocket boroughs, they are very careful to slur over the fact that seats are quite as thoroughly and far more cynically bought, sold, and delivered in the present year of grace."

Even if these difficulties were surmounted—even if Payment of Members and State-paid Election Costs had been wrung by the electors' firm and protracted insistency from the reluctant capitalists' Parliament—there would still remain the House of Lords; and the examples of France and America do not encourage very rosy hopes

of the millennium's arrival through the agency of Paid Members. King Log is preferable to Tammany, and Salisbury to Dupuy. According to Mr. Bodley's "France"—and common knowledge confirms his statements—the French people, disgusted by the weary succession of Wilsonites, Panamistes, anti-Dreyfusards, &c., &c., regard their Parliament with indifference and contempt, and are prepared for any revolution that will get rid of the incompetence and corruption of the Politicians-on-the-make.

As for America, a practically universal suffrage there has spelt not democracy but plutocracy. The members of the House of Representatives and of the Senate are nearly all Politicians-on-the-make. As a writer recently said in the *Critic*:—

> It has remained for the Great Republic, the land of Triumphant Democracy, to perfect within the populace itself the political manacles that hold it down. Mr. Croker has wrought with exceeding wisdom on material made plastic to his hand by the soulless manipulations of the Carnegies, the Leiters, the Havemeyers, the Goulds, the Pullmans, and their like. America, thanks to the great corporations, the neglect of systematic political activity, and the lack of popular sympathy in its best elements, is become the Paradise of the Boodler.

Our Labour representatives *might* prove more worthy of their trust. One never knows. But whilst their mandate continued to depend on the baffling incoherence of party elections—whilst the mad, deep-rooted rancour of inarticulate partisanship drove the Sam Woods to one side and the James Mawdsleys to another, to fight and defeat each other in unavailing party strife—what advantage could the electors derive from the substitution of Delegate Corduroy for Delegate Broadcloth? As Professor Goldwin Smith said, in the *Nineteenth Century* article from which I have already quoted:—

> A party Parliament cannot be a national council or a deliberative assembly in the true sense of the term. It is an arena of party strategy and rhetoric. The object of the Government is to hold its place against an Opposition always struggling to discredit and supplant it, and the energies which should be devoted to administration are largely consumed in mere defence.

The remedy, it seems to me, is to afford the people a constitutional method by which they themselves can veto questionable legislation and initiate the reforms they need by direct legislative action. Our Parliamentary system, as it stands, is too heavy, cumbrous, lop-sided, and slow to keep pace with the needs and aspirations of a democracy awakening at last to its rights, its wrongs, and its responsibilities. Some reformers propose to mend it by Payment of Members, Payment of Returning Officers' Fees, Second Ballot, Electoral Redistribution, and Abolition of the House of Lords. I say that, at the usual rate of Parliamentary procedure, it will take twenty to fifty years to win seven constitutional changes of such importance, and that the remedy is not by any means sure

to cure. I claim that on this and kindred topics the spouting politician and the penny paper are false guides, for they are guides that not only draw us further from the real goal but actually lead us by insidious and protracted stages towards the false goal, towards the old doctrinaire Radical goal, the goal of a blind, childish, helpless trust in an impotent Legislature, with the delirium of revolution and the illusion of charlatan-worship as its consequences. I maintain that interest will never be made to coincide with justice in any form of government except where the people rule themselves, and I insist that before the people can have laws made in the general interest they must be invested with power to make their own laws. The reform that I advocate, as the clearest, straightest, and surest way to the democratic self-government extolled by Mr. Gladstone, is the adoption in Britain of the Referendum and Initiative.

These two words, derived from the Latin, explain themselves.

The Referendum is a principle of government which provides that, upon the passing of any law by Parliament, a petition signed by a reasonable percentage of voters may cause the operation of the law to be suspended until the question of its acceptance or rejection shall have been submitted to a direct vote of the whole electorate.

The Initiative, which all supporters of Direct Legislation regard as inseparable from the Referendum, provides that a reasonable percentage of voters may, on petition, originate or initiate a Bill, and submit it to Parliament; if Parliament passes the Bill, it becomes law; if Parliament rejects it, it goes to a Referendum, or vote of the whole people, at the next ensuing election.

The exercise of these two functions by the people is optional, and would only occur when Parliament failed to provide legislation suited to the popular needs.

The practicability of the Referendum and Initiative has been demonstrated in many States, but first and chiefly in Switzerland, where it has been clearly shown that "the democratic system has manifold advantages over the representative, and that no higher degree of political freedom and justice can be obtained than by granting to the least practicable minority the legal right to propose a law, and to the majority the right to accept or reject it."

If the Swiss Parliament passes a Bill to which many electors are opposed, 30,000 citizens petition the Federal Council for the Referendum. The Bill is then submitted to the direct vote of the people, and if defeated remains for three years absent from the legislative programme; if accepted, it becomes law on the 1st of January following.

If the Swiss Parliament shows unwillingness to legislate on a subject about which a large section of the people have made up their minds, 50,000 petitioners force the hand of the Federal Council, who frame a Bill, and after discussion by the two Chambers submit it to the will of the people.

In the case of every Federal appeal to the nation, the Federal Government sends to each citizen a printed copy of the Bill. If the appeal is a cantonal (or municipal) one, then the Cantonal (or municipal) Government distributes the text of the Bill. In each case a blank ballot accompanies the Bill. At each polling place the voter finds ballots printed with an affirmative vote, a negative vote, and in blank. The affirmative and negative ballots are supplied by private individuals who are interested for or against.

As soon as the question is up, the party leaders take sides and the journals study the question, but very often, as M. Philip Janin, of Geneva, informs us, the party chiefs are not followed by the rank and file; there are many defections. Many party members vote as they see fit—that is, contrary to orders. They consider the measure which is submitted to them for themselves, and *bolt* the orders of party leaders whom they would follow blindly in the electing of persons.

In the case of the cantonal or municipal Referendum and Initiative in the canton of Zürich, the voters vote on the questions brought forward, and elect the councillors at the same time; and this is the plan which I suggest for experimental adoption in Great Britain. The electors at a general election would have two papers to fill up instead of one. The first would be the usual offer of Jones or Smith as Member of Parliament, the second would take something like this shape:—

Are you in favour of legislation to secure:—

	Vote Yes or No.
Old-age Pensions	.....
Provision of Work for Unemployed... ...	.....
Eight-hours Day...	.....
Taxation of Ground Values	.....

And local questions could be voted on in this way every year at the municipal elections.

According to the "Referendum Tafels," the results from the institution of the Referendum and Initiative in Switzerland to February, 1898, show that whilst 208 laws have been submitted to the Legislature, the Referendum was demanded only on 26, of which 17 were rejected and nine accepted. There have been 13 compulsory votings, by which five laws were rejected and eight accepted. There have been, moreover, three compulsory votings on Initiative demands, with the result that one proposal was accepted and two rejected.*

But to show how wide is the range of problems submitted to the popular decision, I append a list of the referendary votings between 1874 and 1895. The results are arranged chronologically, and "a" means an affirmative majority, and "n" a negative:—

1874...	Federal Constitution	a142,186
1875...	Civil State	a8,130
1875...	Right to Vote	n4,680
1876...	Bank Notes	n73,185
1876...	Military Tax	n28,737
1877...	Work in Factories	a5,347
1877...	Military Tax	n11,180
1877...	Political Rights	n81,674
1879...	Subsidy for St. Gothard Tunnel	a163,160
1879...	Death Penalty	a18,897
1880...	Bank-note Monopoly	n139,127
1882...	Patents	n13,072
1882...	Epidemic	n186,313
1882...	Secretary of Education	n146,129
1884...	Secretary of the Department of Justice	n65,187
1884...	Stabio Article	n33,705
1884...	Secretary of Legation at Washington	n81,904
1884...	Passports to Commercial Travellers	n15,395
1885...	Alcohol Question	a72,797
1887...	Alcohol Monopoly	a128,626
1887...	Patents	n145,644
1889...	Prosecution for Debt...	a26,396

* Students of the subject who may desire fuller information as to the questions voted upon will find particulars in my penny pamphlet, "The Referendum and Initiative in Practice" (*Clarion*, 72, Fleet Street, London, E.C.). Students who may seek still fuller knowledge should consult the "Politisches Jahrbuch der Schweizerischen Eidgenossenschaft," by Prof. Hiltz, of Berne; "Chroniques Politiques Suisses de la Bibliothèque Universelle" (Lausanne); "Statistisches Jahrbuch der Schweiz" (Berne). Let the student particularly beware of English works written by prejudiced anti-democrats who ignorantly distort the meaning of the Swiss people's decisions on complicated issues.

FOR DIRECT LEGISLATION.

1890...	Insurance against Sickness and Accidents ...	a191,028
1891...	Retirement Pensions...	n262,126
1891...	Popular Initiative	a62,430
1891...	Customs Tariff	a61,070
1891...	Bank-note Monopoly...	a72,693
1891...	Purchase of the Central (Railroad)	n158,677
1893...	Regulating Slaughter-houses	a64,420
1894...	Arts and Trades...	n22,786
1894...	Right to Work	n232,409
1894...	Spoils System (?)	n205,177
1895...	Diplomatic Law...	n53,472
1895...	Match Monopoly	n43,935
1895...	Military Articles...	n65,000

It may throw further light on the working of the system if I adduce a somewhat striking example of its use—I refer to the legislative project submitted to the popular vote on the 3rd of June, 1894, through the initiative of 52,000 citizens :—

> The right to adequately remunerated work is admitted for every Swiss citizen. Federal and cantonal legislation should make this right effective by every possible way.
>
> The following measures are particularly needful :—
>
> (*a*) Reduction of working hours in the greatest possible number of industries, in order to make work more plentiful.
>
> (*b*) Organisation of institutions such as Labour Exchanges to gratuitously provide work to all who may need it.
>
> (*c*) Protection of workers against unjustifiable dismissal.
>
> (*d*) Public or private insurance of the workers at the public cost against the consequences of want of work.
>
> (*e*) Effective protection for trade unions.
>
> (*f*) Official jurisdiction of the workers in respect to their employers, and democratic organisation of work in workshops and factories, especially in those of the State and Corporations.

This crude but interesting proposal obtained 75,880 votes, as against 308,289 recorded against it. Evidently, then, direct legislation shows no sign of producing half-baked social revolutions "while you wait."

The Hon. G. H. Reid, Premier of New South Wales, says that :—

> Both in Switzerland and the United States, very eminent authorities point out that the effect of the Referendum, instead of throwing the destinies of

the country into the hands of a mob, has been to show that the people are infinitely more accomplished and more able and more sensible, more generous and more just, than those who affect to decry them.

The Hon. Numa Droz, ex-President of the Swiss Republic, says :—

The net result has been a great tranquillising of public life. When the ballot has pronounced, everybody accepts the result. Those who make the most noise cannot impose on the people as they do in other countries; they are taken for what they are really worth. Adapted to a people fundamentally democratic like the Swiss, the Referendum is unquestionably one of the best forms of government ever attempted. It may be thought good to modify it in accordance with the suggestions of experience, but there can never again be any question of doing away with it.

Mr. J. W. Sullivan, an American author, who has made a special study of the Referendum and Initiative in Switzerland, writes :—

Has the trend of Switzerland under direct legislation been toward Socialism? The reply, it seems to me, depends on the meaning one attaches to the word "Socialism." If by Socialism is meant State regulation for the purpose of establishing equality in the opportunities afforded by the land, the reply must be yes. If by Socialism is meant extension of State interference in what are commonly regarded as personal rights, together with State-directed compulsory co-operative working of nationalised land and State-directed compulsory co-operation of industries, the reply, in my judgment—which is, of course, subject to error—is no.

Hans Dietler, in "The Annals of the American Academy of Political and Social Science" (Philadelphia, May, 1899), says :—

The adoption of the law concerning railway repurchase is a triumph of the idea of centralisation, a triumph of the idea of State Socialism, and is an expression of the self-conscious, future-enjoying, and optimistic frame of mind of the Swiss people.

It would be easy to fill a volume with similar testimonies, but I fear that I trespass already beyond my allotted space. After all, "the proof of the pudding is in the eating," and the proof of the Referendum and Initiative is its growth and expansion. Sir Francis Adams, who was British Minister at Berne, in Switzerland, says :—

The Referendum has struck root and expanded wherever it has been introduced, and no serious politician of any party would now think of attempting its abolition.

Despite the inevitable manifestations of the democracy's natural shortcomings, the Socialists of Switzerland enthusiastically stand by the Referendum and Initiative.

It was included in the Socialist programme drawn up by the Congress of Gotha in 1895, and that of Erfurt in 1898.

The Belgian Socialists, in the political programme set forth by Destrée and Vandervelde, "demand the right of Initiative and the popular Referendum in legislative, provincial, and communal affairs."

FOR DIRECT LEGISLATION.

A number of French Socialist Deputies have issued a manifesto and drafted a resolution in favour of the Referendum and direct legislation by the people. These Deputies are Edouard Vaillant, Baudin, Chauvière, Walter, Bonard, Jaurès, Millerand, Gérault-Richard, Sembat, Rouanet, Coutant, Paschal, Grousset, Clovis Hugues, Calvinhac, Groussier, Avez, Dejeante, Faberot, Toussaint, Prudent-Dervillers, Turigny, Couturier, Michelin, Paulin Méry, Goussot, Pierre Richard, and Argeliès.

In America the Referendum and Initiative have been eagerly acclaimed. Charlotte Perkins Stetson, Frances Willard, Hy. D. Lloyd, the Rev. Lyman Abbott, Bolton Hall, J. W. Sullivan, and Eltweed Pomeroy are amongst a few of the advanced thinkers who have most strenuously worked for it in the States. In South Dakota a constitutional amendment was adopted by the Legislature (November 8, 1898) providing that when a particular piece of legislation is demanded by 5 per cent of the qualified voters of the State, that proposition must be submitted by the Legislature to the people at the next ensuing general election. If approved by the people it becomes a law. If the Legislature passes an Act to which there is popular objection, that Act must be submitted to the people at the next regular election if petitioned for by 5 per cent of the qualified voters. If approved by popular vote, it stands; if not, it fails to become a law.

Oregon has followed suit, and also San Francisco. A friend in the latter city writes me:—

> In one respect the San Francisco Initiative is even more democratic than Dakota, for it allows the petitioners actually to frame the words of the proposed ordinance, and have it submitted straight to the people without alteration. San Francisco, however, requires a 15 per cent petition.

My suggestion that a Referendum as to definite political issues might readily be joined to a general election of members is being adopted in Canada. At the next elections for the Dominion Parliament electors will not only be asked to elect candidates, but also to vote "Yes" or "No" on the question, "Are you in favour of reforming the Senate?" The Government will thus obtain a direct and definite mandate from the people. A correspondent in Toronto writes me further:—

> No reform has as many followers in Canada as has Direct Legislation. With remarkably few exceptions all Socialists, Single Taxers, and other advanced thinkers recognise its necessity as the first step and as the means whereby other reforms may be secured.
>
> The principle of the Initiative is already embodied in some of our provincial legislation, as will be seen by a perusal of the pamphlets on proportional representation that I am sending you. The Referendum is also recognised and in operation in various forms—municipally, provincially, and nationally.

Money bye-laws for public works, &c., are referred to the ratepayers (property owners) for ratification or rejection, and the principle has also extended to moral questions. In 1891 and in 1894 the question of allowing street cars to run on Sunday was referred to the electors and was defeated; but in 1897 it was again referred to the people and carried by a small majority.

Most of the provinces have referred the question of prohibition of the liquor traffic to the electors, and a national *plebiscite* was also taken on this question last September. Although a majority was secured, the Government will not accept it as a command, but regard it merely as an expression of opinion. They refused to submit a Bill to the people, but merely asked, "Are you in favour of prohibiting the liquor traffic?"

The question of Senate abolition has been agitated for years by strong organisations, and social reformers have proposed "Direct Legislation" as a substitute. Ontario's single-chambered Legislature has proved to be as harmful to the interests of the people as the double-chambered system, for the party system here allows Corporations to have Bills rushed through in the closing days or hours of the session by securing the Government's co-operation. The Federal Government now propose to "reform" the Senate by having a joint ballot of the two Houses on matters of conflict, and also propose to have a *plebiscite* on "Are you in favour of reforming the Senate?" at the next general election.

The inefficiency of the *plebiscite* will be readily seen.

Direct Legislation is well understood by large numbers in all classes in Canada, as the principle is in operation in most of the trade unions, and was also used in referring questions to the membership of the Patrons of Industry, an organisation of farmers for political purposes which some years ago had nearly 100,000 members, but which is now nearly extinct owing to mismanagement.

The "Independent Association," a large political organisation of farmers and working men in Manitoba and the North-West Territories, advocates direct legislation as one of its leading planks.

The Canadian Direct Legislation League was formed in Toronto last November at a convention of delegates from various parts of the province. Geo. Wrigley, editor of *Citizen and Country* (Toronto, Ont.), is the secretary. Active propaganda work will be done this fall, and the prospects for organisation and progress are excellent. The probability is that a strong political party will be in the field in Ontario in the near future with Direct Legislation as its first demand.

Turning to Australia, we find that the Labour party in New South Wales have not only adopted the Referendum and Initiative themselves, but have definitely forced it upon the Government. Mr. Reid, the Premier, was tremendously cheered in Sydney when, at the opening of the campaign, he declared that "the Government propose that if a Bill has been sent up to the Legislative Council twice in two consecutive sessions, and there is no agreement between the two Houses of Parliament, it shall be referred to the electors of the country."

This is not quite the same thing that has made Switzerland "the purest and most progressive democracy on earth;" but it is a step in that direction.

A South Australian paper says :—

The Referendum idea appears to grow. Australia's one experience—that in connection with the Commonwealth Bill—was quite as satisfactory as anybody could desire. It stands as a negative to the idea that the intelligence of the majority of the people is not as sound as that of the majority of Parliament—a body which can only at best represent the average intelligence of those who create it. All will observe then with interest that a proposed constitutional change in South Australia is to be voted upon by the people. A measure before Parliament provides that every householder and his wife shall have a vote for the Legislative Council, increasing the number of voters from 45,000 to 100,000. The operation of this measure is made subject to the affirmative of the people at a Referendum vote to be taken at the general elections next year.

In New Zealand and Queensland also the principle of Direct Legislation is enforcing general acceptance, and its operation in a limited sense is even now settling the vexed question of Federation between the Australian Colonies.

In Great Britain, the Independent Labour Party and the Social Democratic Federation have both adopted the Referendum and the Initiative on their programme, and a few members of the English Fabian Society stand almost alone amongst the world's Socialists in opposition to the principle. It is making steady headway amongst the trade unions, and has been championed with great ability by Morrison Davidson in the *Weekly Times and Echo*, by Professor Dicey in the *Spectator*, by several writers in the *Daily Chronicle*, and most persistently, perhaps, by the *Clarion*.

My contentions in favour of the Referendum and Initiative—set forth at greater length in two pamphlets obtainable from the *Clarion* office—may be briefly summarised as follows :—

(1) The Referendum and Initiative will remove corruption, because the legislator cannot be sure of delivering the goods.

(2) The Referendum and Initiative will divert the political discussion from parties and men to principles and measures, and thereby substitute thinking for mud-slinging. Very little is heard of party strife and conflict in Switzerland, and men are not considered when great reforms are to the fore.

(3) The Referendum and Initiative, alone amongst constitutional expedients, makes the ballot truly express the will of the people. As Professor Charles Borgeaud says :—"People in Switzerland have long since ceased to maintain that the opinion of an elected assembly is identical with that of the country in whose name it legislates."

(4) The Referendum and Initiative, alone amongst constitutional expedients, ensure perfect proportional representation. The fact that the Swiss electorate frequently disavow the legislative action of their newly-elected representatives is largely due to the fact that

the direct popular vote represents a majority of the whole nation, whilst representative deputies only represent district majorities, which are often so unequal that a majority of members may be returned by a minority of votes.

(5) The Referendum and Initiative will make it possible to introduce reforms *just as fast as the people are ready for them.* To delay a reform for which the people are ripe is iniquitous; to travel far ahead of the people's understanding or desires is, as all history has shown, extremely dangerous, and invariably productive of reactions which lose more than the momentary gain.

(6) The Referendum and Initiative will educate the people in self-government, and ripen them for progress. None will vote unless interested; none can become interested without learning something about the measures under discussion.

The Referendum and Initiative, as Mr. Eltweed Pomeroy has shown in his exhaustive review of the subject for the United States Senate (Document No. 340), "Does not mean more laws, but fewer, shorter, simpler, and more understandable ones." When the laws are made by people who want to understand them, and not by lawyers who want to get paid for muddling them, plain, practical clearness as to every issue is sought and found.

(8) The Referendum and Initiative, even without being invoked, hinder the introduction of corrupt legislation. Dole Bills for squires and parsons would not be introduced if the professional legislators knew that they would be compelled to run the gauntlet of a popular vote.

(9) The Referendum and Initiative will change public rulers into public servants. The foremost of Swiss statesmen, Numa Droz, has written in the *Contemporary Review*:—

> Under the influence of the Referendum, optional or compulsory, a profound change has come over the spirit both of Parliament and the people. The idea of employer and employed, of the sender and the sent, which lies at the root of the representative system, becomes an absolute reality. The people still choose their representatives to make the laws, but they reserve the right of sanction. When they reject a law, in virtue of this sovereign right, there is no entering on a state of conflict, for a conflict can only take place where the exercise of a right is met by a competing claim; and there is here no claim to compete.
>
> The craftsman carries out the work to his own satisfaction; the employer who gave the order is of a different opinion, and sends it back to be altered. It is perfectly simple. Each has done his duty within the limits assigned him. There is no ground of quarrel. *The legislator is not discredited; he is only in the position of a deputy whose Bill is not passed. There is no question of resigning.* If here and there a measure is rejected other measures are passed. There is clearly no want of confidence. Moreover, after rejecting a law it is quite common to re-elect the same representative. Thus, the new *régime* leaves no room for either Ministerial or Parliamentary crisis. The representatives of the

people are elected for a comparatively short term, generally three years. During this time—thanks to the restraining Referendum—they can do nothing really contrary to the public will, at least in any public matter. If they prove incapable, or if their action gives cause of complaint, they are replaced at the next election, and there is an end to it. But honest and capable servants are retained even though the people may have seen fit to dissent from some of their judgments.

(10) The Referendum and Initiative encourage and strengthen a feeling of patriotic responsibility in the electors by constantly impressing them with the fact that upon their knowledge and wisdom depends their country's fate.

As for the objections to the Referendum and Initiative, the chief of them is that the people—not the man who makes the objection, but the *other* people—have not enough sense or understanding to vote on the laws. But, surely, there are no stronger reasons for trusting the people to vote upon men than upon measures. A voter can scarcely be so ignorant of the good and bad features of a proposed law which is to affect his daily life as he must necessarily be of the good and bad parts of a man he has never seen nor heard of until the nominations were made.

Professor Borgeaud, of the University of Geneva, whom I consulted as to the Swiss people's understanding of the laws submitted to them, wrote me under date of May 10th, 1899:—

> As to the questions which you formulate on the educational value of the Referendum and on the practical differences that may arise from the direct consultation of the electors, the experience of Switzerland certainly furnishes the most favourable replies. As to the former, public opinion is evidently based on a quite moral and personal appreciation. . . . The difficulties encountered in a country of languages, religions, habits, and Legislatures so multiple as ours have nowise hindered the experience.

But the opponents of the Referendum tell us further that the people are too apathetic in their own concerns to take the trouble to vote. "The difficulty in England," they say, "is not to secure more political power for the people, but to persuade them to make any sensible use of the power they already have."

My answer is that "the most powerful and perhaps the only means of interesting men in the welfare of their country is to make them partakers in the government." It is precisely because the British people have learned to realise the utter uselessness of voting either for Aristides Rigmarole, Esq., or for the Hon. Alcides Dolittle that their political interest is so terribly atrophied.

"What does it matter?" answers the free and independent elector when urged to vote for Liberal or Tory; "they're all alike when they get in."

It is the same in France. Mr. Bodley's account of the French people is that they take no interest in public affairs, and that they

will reply "*Je ne m'occupe pas de la politique*" when plied with questions that concern the State. Elections see them languid. Voting bores them. Their deputy is *sans doute une canaille comme les autres.*

It is the same in America. The public sentiment respecting Congress is significantly illustrated in the well-known lines:—

> He writes from out in Denver, an' the story's mighty short;
> I just can't tell his mother, it'll crush her poor old heart!
> And so I reckon, parson, you might break the news to her—
> Bill's in the Legislatur', but he doesn't say what fur.

It is the deadly atrophy of the people in regard to their own concerns which makes me so earnest in the advocacy of the Referendum and Initiative. The people of the great democratic countries are sick of Panamists, Boodlers, Liberators, New Zealand and Niger and Chartered Company Directors, and murderous Standard Oil Kings. The only cure is to make them feel that the power has been wrested from these brigands and vested at last in their own hands.

The experience of Switzerland confirms this view. Mr. J. W. Sullivan says:—

> There are in Switzerland more citizens who intimately know their political rights, and who thoroughly debate Government methods and other current public issues, than in any other Republic. This is unquestionably so, with the newspapers busy discussing measures rather than candidates, with every issue made through the voting distinct from all other issues, and with every man a legislator.

And Professor Wuarin, of the Geneva University, writing to me in answer to a query as to Switzerland's experience, says:—

> Whenever a question really agitates the country the ballot is very largely utilised. When the question has only a secondary importance, or when it possesses a special character which prevents public interest, it is another story. The counting of the votes in the case of Initiative or Referendum is a business of a few hours; the telegraph collects the results for the whole of Switzerland on the evening of the election. In short, Direct Democracy has fulfilled all its promise.

In Zürich during a period of fifteen years, surveyed in a careful pamphlet by Herr Stüssi, no less than 74 per cent of the electors on an average filled up their Referendum papers. In Geneva, out of a total of 13,090 possible votes on the State Bank Bill in 1897, 12,877 voted, *or over 98 per cent of the electors*, showing that a measure really interesting to the people will bring them out to vote.

But it is objected that, even if the people understood the general principle of a law, they would not understand the details, and "that corrupt legislation could so word Bills as to appear to serve the public weal though really serving some private interest."

This, however, is not an objection against the Referendum; it is an argument against representative legislators. It exposes a fraud which may be, and continually is, done now, and which might still be attempted, though with much less chance of success, under the wide scrutiny of a general Referendum.

Finally, it is claimed by certain curious-minded alleged democrats that the democracy is itself retrogressive, and that it would, therefore, be unkind to let the democracy rule. "The people are where they are," said a democrat of this type to me, "because they are what they are."

To which I answered: "Yes, and they are what they are because they are where they are. They are what they are because they don't know where they are."

I have observed that if I send my little daughter through a labyrinthic London quarter in an omnibus she will be as ignorant of the way when next she wants to go as she was at the first. But if I turn her adrift, and tell her to find the way herself, she may make a mistake or two, and walk a little further than she need have done, but she finds the way, and afterwards she knows it.

Even so must it be with the democracy. Continue to carry them along in the lumbering, clumsy old Parliamentary omnibus, and they will continue to sleep through the journey, and never know the way. But set them to seek it, and before long they shall find it.

Better that they should bungle into devious by-paths and be compelled to discover the way out, than they should be blindfolded and led by the nose through the unproductive bogs and morasses of privilege-protecting party politics. Of course, they will make mistakes. But when the responsibility of these mistakes becomes all their own they may begin to profit by them.

As John Ruskin says—

> Above all, in our dealings with the souls of other men, we are to take care how we check, by severe requirement or narrow caution, efforts which might otherwise lead to a noble issue; and, still more, how we withhold our admiration from great excellences because they are mingled with rough faults. Now, in the make and nature of every man, however rude or simple, whom we employ in manual labour, there are some forms for better things: some tardy imagination, torpid capacity of emotion, tottering steps of thought there are, even at the worst; and in most cases it is all our own fault that they are tardy or torpid. But they cannot be strengthened unless we are content to take them in their feebleness, and unless we prize and honour them in their imperfection. . . . . And this is what we have to do with our labourers; to look for the thoughtful part and get that out of them, whatever we lose for it, whatever faults and errors we are obliged to take with it. For the best that is in them cannot manifest itself but in company with much error. Understand this clearly: you can teach a man to draw a straight line, and to cut one; to strike

a straight or curved line, and to carve it; and to copy and carve any number of given lines or forms with admirable speed and perfect precision, and you find his work perfect of its kind; but if you ask him to think about any of these forms, to consider if he cannot find any better in his own head, he stops; his execution becomes hesitating; he thinks, and ten to one he thinks wrong; ten to one he makes a mistake in the first touch he gives to his work as a thinking being. *But you have made a man of him for all that.* He was only a machine before, an animated tool. And observe, you are put to stern choice in this matter. *You must either make a tool of the creature or a man of him.* You cannot make both.

What I propose is to make *men* of Great Britain's "free and independent" electors. That is why I ask for the formation of a Referendum League that shall strive and agitate to rescue the masses from their present position as the helpless "tools" of their political leaders.

The Case Against the Referendum,

With Special Reference to the United Kingdom.

BY LILIAN TOMN.

THE Referendum is a popular vote on laws or legislative questions which have been first discussed by the representative body. It is closely connected with another institution, the Popular Initiative, by which sections of the community are enabled to propose a law to the people themselves on any subject they may choose, or can insist that the Legislature shall do so. The idea of popular votings on laws is quite distinct from the election of legislators. At an election the citizens choose their representatives; at a Referendum the voters accept or reject the measures passed or discussed by those representatives.*

It is the Referendum rather than the Popular Initiative which has attracted the attention of jurists and writers of every nationality, and the expediency of introducing polls on laws is a much-debated question not only in the United Kingdom but in the Australasian colonies, France, Italy, and Belgium. The Referendum has become, in fact, a question of practical politics all the civilised world over. Under such circumstances we naturally turn to the two countries that have made a trial of the system in order that we may judge the results of their experience. The Referendum exists in all except one of the State Governments of the United States,† and in the Federal Republic of Switzerland. It has also

* The term *Referendum* is sometimes loosely used in England to denote any kind of popular voting which is not an election. Hence the vote on the erection of a Free Library has been quoted as an instance of the Referendum in this country. The distinction between local mass votings on local questions and national votings on laws is a radical one. In a local voting the citizens are only asked to decide whether an Act already passed by the Legislature shall be put into operation in their district. This is a very different thing from an appeal by the representatives of the nation to the whole body of electors as to whether a certain measure shall become law or not. Local popular voting is in reality only a method of local self-government; the Referendum is a method of legislation.

† Except in Delaware.

been extensively tried in the trade union world. In the United States all changes in the written constitution of each State have to be submitted to a vote of the people of that State before they can become law. Nor is the voting on a constitutional amendment the only form of Referendum. In some of the State constitutions a number of questions are specified on which a popular vote must always be taken by the Legislature. They are chiefly questions connected with an increase of expenditure or such thorny questions as liquor prohibition and woman's suffrage.

Changes in the State constitutions are not, however, of frequent occurrence, and a popular vote on a legislative question is more or less exceptional. The Popular Initiative does not exist in any of the American States. Hence it is in Switzerland that we can best estimate the value of the Referendum, for there the Referendum has been in active operation in almost every branch of government for the last twenty-three years. In the Swiss Republic the Referendum is national, and not merely confined to the component States, as in the New World. The people are not merely called upon to give a solemn ratification to a constitutional reform; their consent is an indispensable factor of the ordinary machinery of legislation. The Central Government has only power to legislate on a limited number of subjects, all other questions being dealt with in the twenty-five Legislatures of the twenty-five cantons at their discretion. But in the spheres of both Federal and Cantonal Governments the Referendum and the Popular Initiative are recognised in some form. In the Federal Government all laws which in any way affect or amend the constitution are sent at once to the people, and without the popular ratification no constitutional change can be brought about. In the case of ordinary laws, any 30,000 registered voters can bring about a poll on any law passed by the Federal Legislature which is not urgent, provided the demand be made within ninety days after the law is published in the official gazette. If no demand is received the silence of the electorate is considered to be tantamount to assent on their part, and the law comes into force on the ninety-second day. The general result is that all Federal laws either go to the people automatically or can go if a fraction of the citizens desire it. Nine of the twenty-five cantons which make up the Swiss Republic have organised the Referendum as it exists in the Central Government, *i.e.*, it is compulsory in the case of constitutional amendments, optional in the case of ordinary laws; six of the remaining sixteen legislate by means of a mass meeting held once a year; and nine others have made the Referendum compulsory in the case of every law, the voting taking place automatically twice a year. Only in one canton is the Referendum limited to changes

in the constitution. Switzerland is, therefore, the country of the Referendum *par excellence*, and in discussing the desirability of introducing some such form of popular voting into our own country it will be necessary to refer from time to time to the working of the Referendum in the Swiss Republic. In the following pages we shall examine, first of all, some of the arguments usually brought forward in favour of the Referendum; then we shall try and estimate some of the dangers that are or probably would be connected with the direct intervention of the people in legislation; and finally we shall consider certain practical difficulties which stand in the way of the incorporation of the Referendum into our own constitution.

Those who advocate popular votings on laws for this country in addition to and distinct from the election of legislators maintain that it would be possible by this means to divorce legislation from party politics. They suggest that at a Referendum a definite issue would be placed before the electors unhampered by party considerations or by the personal predilections which influence men in choosing their representative. In other words, the law would not be obscured either by the party or the candidate, but would be judged wholly on its own merits. Moreover, by voting separately on the measures of a party, it would no longer be necessary to subscribe to the whole party programme, taking the bitter with the sweet.

The partisans of the Referendum seem to me to be too hopeful. They expect that a man who has belonged to a party all his life, who has attended party meetings, is a member of a party club, and takes in a party newspaper, will suddenly vote on a law with a mind as unbiassed as that of a stranger who has only arrived in the country the evening before. It is demanding too much to suppose that an Englishman would vote on a measure wholly on its merits, and forget that it came from his enemies the Liberals and was supported by his friends the Conservatives, or *vice versa*. Moreover, matters would be complicated by the fact that the fate of the Ministry would probably depend on the fate of the Bill. According to our present constitutional conventions the Ministers must retire before a hostile vote of the Lower House on a Cabinet measure. Still more, then, would they feel impelled to retire before a hostile vote of the whole electorate. It is not probable, with the existence of the Government hanging in the balance, that a man would vote on his own independent judgment, and a Referendum would eventually be run on party lines like any election. It is quite possible to argue that the Ministry need not resign—that a defeat on this particular measure would not mean that the country disapproved of their general policy. It seems,

however, impossible that a Ministry could stay in power which had appealed to the country as a final tribunal and had then received a rebuff. The fact would remain that the electors who supported the majority at a general election had now ranged themselves against the law passed by the same majority, and if the Ministers considered that this fact did not constitute a loss of confidence and decided not to resign in consequence their position would not be a happy one. The party out of power would be always taunting the party in power with having misinterpreted the feelings of the country on every question as it arose, and would keep on demanding fresh Referendums until that party had resigned. Having once resigned, you get the further anomaly of a new Ministry in power representing the minority of the House of Commons, when legislation at once becomes impossible and a dissolution inevitable.

The Referendum, in my opinion, would only tend to multiply general elections, and would prove a glorious weapon for opposition and obstruction of all kinds.

The position of the individual member of Parliament would also be a difficult one. Suppose he voted for or against a Bill, and the vote in the constituency that he represented were antagonistic to the vote he had given. Is he to resign his seat, or can he continue in Parliament to be reproached with representing a minority? If, in such a case, a large number of members felt that they ought to stand for re-election we should have a modified form of general election whatever the action of the Ministers.

In Switzerland party government and party organisation, as we understand them, are almost unknown. The members of our British Cabinet are all appointed by the Queen from that party having a majority in the House of Commons. They all hold the same opinions, and they fall or stand together. When their measures receive an adverse vote in the House of Commons they all resign and give place to the members of the opposite party or appeal to the country.

The Swiss have not got two great closely-organised parties. There are several parties which change and vary in their relations to each other. The Central Executive, or Cabinet, is purposely composed of members chosen from the different parties. It does not resign when outvoted by the Parliament; it is practically permanent, although nominally elected every three years.* The

* Only two members of the Swiss Executive have resigned on political grounds since 1848, one on account of a disagreement with the Legislature and one because his law was rejected at a Referendum. The Ministry as a body has never resigned. The Executive is so permanent that the average term of service is ten years; four members have, however, served twenty years, and one member who died in 1895 in office served thirty-three years and was six times President.

Swiss Parliament is also chosen for three years, and meets twice a year for four or five weeks. It does not dissolve when its measures are negatived by the people, and the Swiss electorate, while constantly rejecting the laws made by their representatives, nevertheless usually send back those representatives to serve for the same term of years.* Indeed, a large proportion of the elections are unopposed. When we in England should change our Ministry the Swiss vote down the laws prepared by their Ministry, but keep the same men in power. There are, therefore, no political upsets in Switzerland in consequence of the Referendum, because party government is practically non-existent. The Referendum is worked in Switzerland amid surroundings that are without parallel in any other country. Were it introduced into a State where party organisation was close and party feelings keen it would tend, in all probability, to follow party lines.

It is said that at the present time in England the gravest laws can be passed by a majority not larger than that required for passing an Act dealing with sea birds' eggs, and that any chance combination of members might bring about the most terrible constitutional results. At present once a member of Parliament is elected there is no sort of check on him; he can sanction the most unwarranted innovations, and although he may pledge himself to one course of policy his constituents have no power to stop him if he does something quite different. This danger, though existing in theory, is not found by experience to be very serious. Members of Parliament often wish to be re-elected, and are as a rule most anxious to consult the wishes of their constituents. The fear of non-re-election is in itself a most potent check. The House of Lords is so constituted, moreover, that no very important constitutional change could be carried through suddenly without a dissolution, when the opinion of the country would make itself felt as effectively as if the Referendum were adopted.

It is quite true to say that the Referendum would be a check. The question is whether it would not be too great a check. The Referendum never constructs; it either sanctions work already passed by Parliament which would become law in any case, or it prevents construction. The Referendum has been called "The People's Veto," and the name speaks for itself. In practice it has always proved itself to be of a most conservative character. In the Swiss Federal Government between 1874, when the Referendum was introduced, and February, 1898, there have been forty-two

* Between 1888 and 1896 the Lower House (National Council) only lost twenty of its members by non-re-election, while sixty-two retired voluntarily. There are no party organisations for the election of candidates, each man being chosen in his own canton, where he is perfectly well known.

votings in all out of a possible 211, and twenty-four laws were rejected. In three cantons—Zürich, Berne, and Solothurn—where the people vote on every law, we find that they have vetoed about a quarter of the laws passed by the Legislature. In Aargau between 1870 and 1889 twenty out of fifty-six, or nearly one-half, of the laws were defeated at the polls. In St. Gall, where the Referendum takes place only at the option of the people, sixteen laws out of a possible 142 have been voted on between 1861 and 1894, and only two out of the sixteen have been accepted. In Zürich, which is an industrial canton, a Factory Act fixing a twelve-hours day and protecting women and children was thrown out in 1870. In 1877 they voted heavily in this canton against a Federal factory law on the same subject. In 1881 they voted down another law providing for the compulsory insurance of workmen against sickness, and making the employers liable for injuries caused to their employés by accident. The people of Zürich have also repeatedly rejected measures for raising the age at which children should be kept at school. An American writer has said that this result does not mean that the people are certain to reject laws intended for the benefit of the working classes, but that it proves that they are less ready to sanction measures of this character than the Legislature is to pass them.* In the Federal Government the people have assented to the State monopoly of the sale of alcohol, but have refused a proposed monopoly of matches designed to protect the workers against necrosis. A law to invest the Central Government with power to extend the Factory Act to small workshops has also been rejected at the Referendum. A law to give pensions to public officials was refused by the second largest majority ever known in Switzerland, and it was also one of the occasions on which the greatest number of electors went to the poll. A Bill to give the Legation at Washington an extra £400 a year and a Bill to increase the number of Consuls abroad were also promptly rejected on the ground of the expense involved.

In 1881 the voters decided by means of a Referendum against giving the Central Government the monopoly of issuing bank notes. Ten years later they changed their minds and voted in favour of the bank note scheme. In February, 1897, they refused the law creating the State Bank which was to issue the notes, and thus have made the monopoly a dead letter for the present. The history of Swiss legislation seems to prove that the Referendum is quite as likely to kill good measures as bad, and that it is a very real and effective check on legislation.† It has been pointed out

* See Lowell, "Governments and Parties in Continental Europe," Vol. II., p. 266, &c., for a discussion of this subject.

† Deploige, "The Referendum in Switzerland," pp. 214—249.

that the Swiss people object to laws which cover a great deal of ground, which are complicated, and which try to effect too much at once.* M. Droz, who was a member of the Swiss Cabinet (Federal Council) for nearly twenty years, says: "I consider that this institution (the Referendum), which is of a frankly conservative character, has done more good than harm. Although I am a friend of progress, I nevertheless desire that it should not be hasty, inconsiderate, or turbulent. The democratic machine has need of a counter-check; the optional Referendum is one, and for that reason I support it." †

In the American States the same tendency to refuse laws is also noticeable. Of fifty-one constitutional amendments presented to the people between 1888 and 1890, twenty-five were accepted and twenty-six rejected.‡

The result of polls on laws seems to bear out the dictum of Sir Henry Maine, who says:—

> It is possible by agitation or exhortation to produce in the mind of the average citizen a vague impression that he desires a particular change, but when the agitation has settled down on the dregs, when the excitement has died away, when the subject has been threshed out in all its details he is sure to find in it much that is likely to disturb his habits and his prejudices, and so in the long run votes "No" to every appeal.§

It is worth noticing that a legislative proposal which is refused by the popular vote is thrown back several years, and thus a necessary measure is, perhaps, unduly checked, as there is always a certain difficulty in again bringing up a subject which has been expressly vetoed at the poll. || A law which is accepted by a small majority, moreover, seems to suffer a loss of prestige in consequence. There is also a certain difficulty in repealing or altering the laws that have been ratified by the people, although their modification may have become necessary in course of time. This is all the more important as the citizens have to vote on a law before it has come into force, before it has been interpreted by the courts, and before any one knows how it will work. It is impossible to tamper with a popularly accepted law either to rectify mistakes or supply omissions without another Referendum, "hence blemishes are tolerated," says Mr. Bryce, writing of America, "which in England would be removed at the next opportunity." ¶

The two main arguments in favour of the Referendum which we have examined claim that it would tend to distinguish measures from men, and would prove an additional check or safeguard. It

* Lowell, "Governments and Parties," Vol. II., p. 269.
† Droz, "Etudes et Portraits Politiques," p. 467.
‡ Bryce, "American Commonwealth," p. 458 (Third Edition).
§ Popular Government. || Cf. Home Rule.
¶ "American Commonwealth," pp. 463 and 464 (Third Edition).

is also maintained that the Referendum would bring out the great mass of the silent electors and make them realise their responsibility, that it would give due weight to minorities, and educate people generally to take an intelligent interest in legislation. The facts, however, lead us to believe that the great mass of the silent electors would still remain silent. In this respect Switzerland is very instructive, for, although the British and the Swiss constitutions are so totally different, human nature is still at bottom the same, and the behaviour of the English voter would probably resemble that of the Swiss and American.

In the voting on Federal laws in Switzerland the percentage of those who go to the poll has fallen as low as 42 per cent of the registered electors. Of all the Federal laws accepted only one has been actually accepted by a majority of the registered electors, and only one of the twenty-five laws rejected has ever been rejected by a majority of those entitled to vote.

In the votings in the different cantons on the laws passed by the State Legislatures the percentage of those who take the trouble to vote is even smaller. In Berne the average number of votes recorded at a cantonal Referendum is 43 per cent, but the figure has fallen as low as 20 per cent. We notice, however, a significant rise to 63 per cent at elections, and when an election and a Referendum take place on the same day the percentage of those voting is augmented. It would seem, therefore, that the people are more interested in choosing their representatives than in voting on laws.

Again, in the canton of Rural Basle, the law enacted that unless the *total* number of those who voted was equal to half the electors the law failed, whatever the result of the Referendum.

Between 1864 and 1884 forty-eight laws were accepted, twenty-eight rejected, and no fewer than twenty-six failed because not half the electors could be induced to record their vote. Certain cantons, realising the absurdity of the idea of direct legislation when the people thus declined to legislate, have tried the expedient of making voting compulsory. They accordingly fined those electors who did not put their tickets in the ballot box. The result in Zürich is an illustration of the old proverb that "you can bring a horse to water but you cannot make him drink," for from 21 to 24 per cent of the ballot papers given in are *blank*. The people will not take the trouble to fill them up, although in Zürich voting by proxy is allowed, and the polling always takes place on a Sunday. But here, again, we find that the percentage of those voting increases more than 10 per cent at elections. In America, again, some States require the assent of a majority of the qualified voters before a constitutional change can be brought about, and it

often happens that this majority cannot be obtained.* The Swiss are the best educated people in Europe, they are accustomed to voting on laws and legislative questions on every possible occasion, and are comparatively unaffected by party considerations in recording their vote. Yet we do not find, even under these favourable circumstances, that the Referendum makes the people realise their responsibility. In Switzerland laws seem to be rarely rejected on their demerits. They are often vetoed because the people do not approve of the policy of the Government in general, and they take this method of showing their displeasure instead of changing the party in power as we should do in England. We thus get certain periods when there seems to be an epidemic of rejection, and the laws fail at the Referendum whether they are good, bad, or indifferent, the same laws being often accepted later without a protest. This may be ideal democracy, but it is not ideal legislation. M. Hilty, a Federal Councillor and one of the great authorities on the Referendum, says :—

> I think that of all the laws that have been rejected only one, that giving pensions to public officials, and the order creating a Secretary of Education, have been rejected owing to an actual aversion to their contents, and not to a mere passing dislike.

M. Droz says that the fate of the laws depends a good deal on whether the crops have been good or bad. He also says† :—

> The art of the politician consists in knowing how to take advantage of circumstances in order to create great currents of opinion, either favourable or unfavourable to a measure. The mass follows these currents or remains indifferent.

M. Deploige tells how a Deputy in the canton of Berne made an examination of the reasons which led the inhabitants of that canton to vote heavily against a law on bankruptcy. He found that the majority against the law consisted of two classes of men : the first were the small distillers who had been obliged to shut up their stills on account of the Government monopoly of alcohol, the second were the peasants who had not yet been indemnified for the damage caused by the recent military manœuvres, while the peasants of the neighbouring canton, Solothurn, had already received their compensation. Hence the Bankruptcy Law failed.

There are, however, in Switzerland certain methods by which the people may be induced to accept laws. One method is to incorporate some popular provisions in an unpopular law, and by means of various concessions so unite the minorities that a law is eventually carried. In Berne, when the Government found it impossible to submit the budget to the Referendum, they had to get the people's consent to add it to the list of laws outside the

* Bryce, "American Commonwealth," p. 464.
† "Etudes et Portraits Politique," p. 491.

Referendum. This was effected by suppressing a number of minor official posts in the same Bill, a proceeding which strongly appealed to the saving nature of the Swiss, and the measure was carried.

Another method of getting a law accepted is to bring it up again and again until the people get weary of voting against it, and finally let it come into force. The Federal law on the tax imposed in the case of exemption from military service was passed three times by the Swiss Parliament before it was ratified by the people. Another instance is supplied by a tax law in the Grisons, which was accepted after it had been submitted no fewer than six times to the popular vote.

There are also ways of evading the Referendum by declaring the matter "urgent" or "not of general import," and so outside the sphere of the Referendum. Several measures involving financial outlay, which would have had no chance with the Swiss electors, have been withdrawn in this way, as the great mass of the people do not seem to be willing or far-sighted enough to sanction expenditure for the benefit of future generations.

Thus the sovereign will of the people seems still to be largely at the mercy of its representatives, even when the Referendum is so thoroughly established as it is in Switzerland. The experience of that country proves that the people are not anxious to vote, and that they go to the poll from very mixed motives, the contents of the proposed law having comparatively little influence on its fate.

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The great danger of the Referendum is that it has a tendency to tempt the electorate to believe in its own infallibility, and to dispense with informed and independent direction, a consummation devoutly to be avoided in the interests of good government. In the trade union world Mr. Sidney Webb says that—

> Half a century of practical experience of the Initiative and the Referendum has led not to their extension but to an ever stricter limitation of their application. The attempt to secure the participation of every member in the management of his society was found to lead to instability in legislation, dangerous unsoundness in finance, and general weakness in administration.*

In England we know from history that there are certain cases in which it would have been most unwise to consult the people even on a burning question. Public opinion would not have sanctioned for a moment the Toleration Act of the seventeenth century, the Act preventing the burning of witches in the eighteenth, or the Catholic Emancipation Bill in the nineteenth. It is doubtful whether any Government would now pass a measure in the teeth of popular opinion, but it may still decline to take action in a direction demanded by the people. There are certain cases, as Mr.

* "Industrial Democracy," Vol. I., chap. 2.

Dickinson has pointed out, when it would be the duty of Parliament to stand out against the wishes of the nation in the interests of law, order, and humanity.*

In Switzerland, however, the people possess in the Popular Initiative the means of forcing the hand of their Legislatures. The effect of the Referendum is to confer upon the citizens the right of accepting or rejecting a law which has been made for them; the Popular Initiative enables those citizens to actually make the laws themselves. When a law is voted down at a poll it is possible to argue that its rejection is owing to the fact that the people want something else. When the people have the right to say "We do not want this" it is illogical to say that they do not know what they do want, and then if they really know what they want it is quite arguable that some machinery should be devised to let them express their wishes. It is only a step for the voters to wish to make laws instead of merely vetoing them, to give the coach a start instead of always putting on the drag. Historically the Popular Initiative has always followed close on the heels of the Referendum. The institution is organised in such a way in the Federal Government that any 50,000 Swiss citizens can either send an imperative suggestion to the Government as to the subject of a law or can draft the law themselves. In either case it is submitted to the Referendum to decide its fate. In the Federal Government the Popular Initiative has been exercised three times since 1891, when the right was regulated and enlarged. The first law passed in this way enacted that animals should not be killed without having previously been stunned. This was aimed at the Jews, who bled their animals, and was of the nature of religious persecution and a most unhappy inauguration of the new right. Of the other attempts one was a Bill which enacted that every person should have adequately paid work provided by the Government should he desire it, and the second directed that the surplus in the Federal Treasury should be divided among the cantons at the rate of 2frs. per head of the population.† Both these laws were rejected by the people, and their tenour needs no comment.

* "Parliament in the Nineteenth Century," p. 174.

† The length to which this right may be carried is shown in the use of the Initiative in the municipality of Berne when the question of erecting a new bridge arose. A popular vote fixed the site of the bridge; another decided that it should be of metal, contrary to the wish of the minority, who wanted it of stone. Everything was ready to commence the work when another Initiative was brought forward that the following questions should be submitted to the people: Do you wish to change the preceding vote? Do you wish such a bridge at all? Do you wish any other plan? The Council declined to put the questions in this form, and decided only to submit the first of them. The minority thereupon objected strongly, saying that this was a violation of popular rights.

THE CASE AGAINST THE REFERENDUM,

At present* two Initiative demands are being sent in to the Government—one that the Executive shall be elected directly by the people, the other that the Lower House shall be chosen by the system of proportional representation. It seems quite absurd that such important constitutional changes should be forced on the Government by any chance combination of 50,000 citizens who draft the law behind closed doors and without public discussion, and who are not in any way responsible. Once such a Bill has been drafted and signed by two persons it is unalterable, and there is no possibility for debate or amendment.

Thus, when the people are led to believe that their legislative judgments are final and infallible we get them dispensing with the Legislature altogether, assuming the active rôle, and making laws themselves, with results which are grotesque and dangerous in Switzerland, and which created a general instability in the trade union world.

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There is another great objection to the Referendum, and that is its tendency to lower the sense of the responsibility of the Legislature and the quality of the men who seek to be elected. These are, of course, facts that cannot be measured by statistics, and they must naturally depend upon the opinion of the person who makes the assertion.

It is not difficult to see that when the work of the Legislature is not final the debates would be apt to diminish in importance. The legislator who no longer makes a law, but merely gives a piece of advice by his vote, would scarcely take so much interest when he had less responsibility. Realising that his doings were not of vital importance, he would not see the force of worrying over a law night after night. There would be a disposition to shift the burden of decision on to the shoulders of the electorate, who have not been forced to think about the question and have very little time to devote to its study. In the United States some of the Legislatures have been only too glad to shirk the onus of decision, and have sometimes tried to submit thorny questions to the people on their own initiative, a mode of proceeding condemned as unconstitutional by the courts.

In Switzerland it has been said that the legislators have more than once voted for a law to get it out of the way, hoping that the people would vote it down, and that they often do not dare to defend before the people the law which they voted for in the House. It has also been maintained that the Referendum makes

* July, 1899.

the Swiss legislators afraid to undertake any really great reform because they know that the electorate will not accept anything very far-reaching, and that all the debates and discussion in Parliament will go for nothing when such a measure is submitted to the poll. Nor is it at all surprising that the Referendum should create timid legislators. As the seat of ultimate sovereignty, Parliament commands a respect and offers an opportunity of usefulness which makes its membership attractive to men of public spirit. To attribute the ultimate authority on every law to the fluctuating majority must tend to drive strong and independent men from politics, and leave the more yielding and inert to do the work. The Referendum in this country would strike a fatal blow at the sovereignty of Parliament, and any degradation of the position of Parliament must affect the quality of the men who are willing to stand for election.

Moreover, in the United Kingdom such a drastic measure as the Referendum is happily unnecessary.

The two countries that have adopted the Referendum have done so under peculiar circumstances. The Swiss people have never been used to Parliamentary Government, whereas they have been accustomed to mass voting in their local assemblies for half a thousand years. They set up representative assemblies in the cantons after 1830, which proved a failure. The Swiss were unable to control their representatives in any way, and had no means of bringing public opinion to bear. The voting on laws passed by the Legislatures was, therefore, devised as a check on the Chambers, and was incorporated into the Federal Constitution in 1874. The Referendum was adopted in Switzerland because the citizens were unfitted by habit and training for Parliamentary Government as we know it. They have devised instead a system which is no less remarkable, but which is as different from the British Constitution as night is from day. In the United States the Referendum has also been introduced owing to the failure of the representative system. It is a desperate remedy to combat a desperate disease, viz., the corruption of the State Legislatures. There is a tendency to curtail as much as possible the subjects with which the Legislatures may deal, and to include more subjects in the constitution, any change in which must be voted on by the people.* Our Parliament is not, however, debased and venal; it is not, happily, swayed by a moneyed lobby; our leaders do not openly seek only their own private ends, and our people have not lost control over the Legislature and Executive. We are

* The American Legislatures in many States are now forbidden to meet except once in two years, and then only for a few weeks.

not suffering from any of the diseases of the body politic which are the despair of patriotic Americans. There is no analogy whatever between the condition of the State Governments of the United States, with their dishonoured Legislatures, their lack of responsible government, and the absence of Ministers from the legislative body, and the Parliament of Great Britain. In speaking against the Referendum for Australia in the Convention appointed to draw up the new Federal Constitution, Mr. Wise said that

> Parliament is a most flexible instrument of public opinion; it controls Ministers by questioning them upon their policy, by censuring them for their misdeeds, and ultimately by dismissing them from office. As a representative of every class in the community it ensures that every interest will be regarded, and that no grievance will go for a lengthened period unredressed. It trains up a succession of competent men to undertake the service of the State.

If this be true of the Australasian Parliaments it is equally true of the Mother of Parliaments, for the British Legislature, with all its faults, is the most successful representative institution in the world.

The Referendum has been adopted in other countries as a remedy for evils which are happily unknown to us. We ascertain the feeling of the country by a different method, which is in accordance with our historical traditions and training, and which has the advantage of giving time for reflection, discussion, and amendment.

Big questions are virtually decided at a general election, and to submit second-rate questions would be to add too much to the already heavy burden of voting. One need only instance the Reform Bill, the Repeal of the Corn Laws, and the Home Rule question to prove that popular opinion can make itself felt as effectively as if every man had written "Yes" or "No" on the ballot paper. In the United Kingdom at the present day we have Parish Council, District Council, County Council, School Board, and Parliamentary elections, and life seems one long process of going to the poll or trying to persuade other people to record their vote. We do not want another process, a sort of aggravated general election, superadded. M. Droz complains that in Switzerland in one year he had no fewer than twelve laws, cantonal or federal, sent him to vote on, and was required to go to the polls no fewer than a dozen times. One Deputy in Solothurn said that he was summoned to vote once every three weeks.

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Not only are there many objections to the principle of the Referendum, but there are grave practical difficulties in the way of introducing such a system into the British Constitution. There are four ways in which this might possibly be done.

In the first place there might be an Act of Parliament passed which should specify certain classes of questions which must go to the people before receiving the royal assent. An Act, however, could not provide for every contingency or important matter that might arise, and, though it might be useful as far as it went, it would be distinctly inadequate.

Secondly, there might be a Referendum in the case of a dispute between the two Houses. In five of the Australasian colonies it has been proposed that when a Bill has twice been rejected by the Upper House, then the Lower House may if it chooses refer the question to the country. The difficulty here is to know in what terms to refer the dispute—whether to submit the Bill to the country as it left the Upper House or as it left the Lower House, or whether the two Bills should be laid before the electors with all the amendments for them to decide between the rival schemes. The possibility of appealing to an outside source would stiffen the backs of both Houses in any dispute, the obstinacy of majorities would increase, and both sides would be less willing to hammer out a compromise. In Great Britain a Referendum in the case of a dispute between the two Houses would only mean that the Bills of the Liberal party would be sent to the country. If they were then rejected the Liberal party would have to resign and the Conservatives would come into power. This form of the Referendum would really give the Lords the power of forcing a dissolution when the Liberal party should have the majority, and would thus be a great addition to the power of the Upper House.

The third plan proposed is that Parliament should be allowed to decide by a vote of both Houses when to appeal to the Referendum, and should have the right to send a Bill to the country by tacking on a Referendum clause to any Act they choose, to the effect that the law should not come into force until it had been accepted by the electorate. Were this possible, however, the party out of power would always be clamouring for a Referendum clause to be added to a Bill, and the party in power, who would not wish to run the risk of the Bill being rejected, would never grant it, consequently there would be endless debates and obstructions. The Referendum at the option of Parliament was found to work in this manner in the canton of Berne, and accordingly the Swiss legislators decided not to introduce this form when the Referendum was incorporated into the Federal Constitution in 1874.

Moreover, after the Parliament has decided in favour of a Referendum being taken, the Cabinet has to organise the voting. They are thus able to choose their own time to refer the Bill, and may so seize their opportunity that an important domestic Bill

may be carried by the momentary popularity they may have gained from some military success. When the matter is left in the hands of the Executive they can put the question as they like, and when they like, and how they like, and the result of this in the trade union world is thus summed up by Mr. Webb:—

> If the executive could choose the issues to be submitted, the occasion on which the question should be put, and the form in which it should be couched, the Referendum, far from supplying any counterpoise to the executive, was soon found to be an immense addition to its power. Any change which the executive desired could be stated in the most plausible terms and supported by convincing arguments, which almost invariably secured its adoption by a large majority.*

The only democratic expedient is the method tried in the Swiss Federal Government, by which a certain number of citizens petition for the Bills they wish to vote on. If the Parliament is so untrustworthy and so little representative that its legislation has to be checked and overhauled, then the electors ought to be able to choose when they will intervene. In fact, the only time people will wish to interfere is when the majority in Parliament is not acting in accordance with the popular wishes, and who can judge this so well as the people themselves? The matter must, therefore, be left in the hands of the country, and the occasion cannot be satisfactorily settled by Act of Parliament or by a vote of both Houses. But if the voters are allowed to petition, as in Switzerland, it means that the matter will be given over to a political caucus or association. No one person would ever dream of collecting thousands of signatures by himself. There must be organisations or clubs to effect this, and they will be compelled to justify their existence by being continually active and by constantly sending in demands. In Switzerland there is a group of professional politicians who make a business of getting up Referendum demands to discredit the Government. They are known as the *Neinsager*—the people who say *no*. The result of such petitioning could only be the obstruction of legislation, to say nothing of the burden of being continually worried to sign demands for the Referendum.

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There is yet another practical difficulty in connection with the introduction of the Referendum, and that is the form in which any legislative proposal shall be referred to the country. There are two alternatives: the one is to frame the question in general terms embodying the principle of the Bill; the other is to submit the Bill complete in all its details. The former commends itself at first sight. The idea of laying simple definite issues before the country and obtaining a direct "Yes" or "No" to them is a very

* "Industrial Democracy," Vol. I., p. 26.

attractive one. Great questions are not simple, however. The problem of Employers' Liability, for instance, includes all the disputed points about "contracting out" and "contributory negligence." It is not easy to see how such technicalities may be explained to the ordinary mind. All great questions are very complicated and involve many principles. It is impossible to place the real meaning of a very important piece of legislation before the electors in the form of a simple query requiring merely an affirmative or negative answer to settle it once for all.

Let us imagine, however, that such a question has been framed, and that an affirmative answer has been received. The Parliament would then proceed to obey its mandate, and would draft a law embodying the wishes of the nation. Then the further difficulty arises of knowing whether the Bill in its final form does or does not represent the wishes of the voters. It is quite possible that it might not satisfy them at all, and they would say that their mandate has been grossly misinterpreted and their trust and confidence abused.

The drafting of the question and the explanation of the issues involved are two great stumbling blocks, but they are slight compared to the task of framing a law which would satisfy those who voted for it in principle.

Let us, then, take the case of a finished Bill being set before the elector for his approval or rejection, as it is in Switzerland. But to expect the man in the street even to understand the phraseology of a long and technically expressed Act of Parliament is to demand too much from him. A farm labourer cannot be expected to understand a commercial code or a townsman the import of agricultural legislation. It is no answer to say that since these same men can choose a representative they are equally competent to pronounce on his work. No one would ask the first man he met in the street to build him a house or to set his leg, but he could ask him for the address of an architect or a doctor. A man's daily experience leads him to form a fairly accurate judgment of his fellow men and helps him to choose between two political parties, but the ordinary man lacks the necessary training which would enable him to appraise measures at their proper worth. Each voter ought to be able not only to understand why legislation is necessary, but also whether the law in question is adequate to meet the case. This, however, is more or less impossible in a great Empire like ours. Switzerland is a small nation with only 700,000 voters. The population is stable, and mainly agricultural; there are no great cities with their congested mass of unemployed, and no marked inequalities of wealth. She has, therefore, none of the industrial and social problems to face which beset more

powerful peoples.* Modern legislation in a large country with a huge population is a very intricate matter. A great deal of it is necessarily so sectional and specialised, and so much of it deals with particular classes of the community the wants of which other classes could not possibly realise, that it would be hopeless to expect those who are not practically acquainted with the facts to be in a position to judge either the occasion for or the adequacy of the remedy applied to the particular case. To lay a finished Bill before the country is to appeal from comparative knowledge to comparative ignorance. By the time a member has passed through his electioneering and gets in Parliament and hears innumerable debates he probably knows a little more about the subject than the man in the street. His election is a political education, which is continued in the House. The difficulty is that the member when sitting in Parliament has to vote on party lines, but we have seen members change sides and parties split up on great questions. The individual member has, therefore, still some freedom.

Of course, any Bill referred to the country would be freely discussed in the newspapers and at public meetings, which might tend to explain the matter at issue. The majority of people are not so constituted, however, as to habitually read the Opposition papers except when they want amusement, nor are they in the habit of going to Opposition meetings with the view of changing their convictions. Very few people, therefore, hear two sides of

* According to the last census (1888) the population of Switzerland was 2,917,740, an increase of ·375 per cent per annum since 1880. The revenue was 91,556,543 francs about £228,891. In 1897 the imports amounted to 1,114,442,097 francs (£2,786,105); the exports, 747,436,486 francs (£1,868,591). There were 4,933 factories in 1895, employing 200,002 workpeople ("Statesman's Year Book, 1899"). Compare these figures with those given by Sir R. Giffen in his lecture to the Colonial Institute. In 1897 there were 681,705 million square miles occupied by English races owing allegiance to the British Crown and 472,046 million square miles occupied by subject races—an increase of 285,469 million square miles since 1871; *i.e.*, a new empire in twenty-six years. If we include Egypt and the Egyptian Soudan 1,350 million square miles must be added to the above total. The revenue of the lands occupied by English races is 145·6 millions sterling (an increase of 59·6 millions since 1871). In the lands occupied by subject races the revenue amounts to 111·8 millions (increase, 55·3 millions). The value of the exports and imports of the lands occupied by English races was 1,036 millions sterling in 1897 (an increase of 247 millions since 1871). In the lands occupied by subject races the exports and imports were worth 338·1 million sterling (increase, 180·9 millions), and Egypt 23·6 millions. The population was 50·08 millions in 1897 in lands occupied by English races, an increase of 33 per cent since 1871. In the lands occupied by subject races the population was 357·33 millions, an increase of 44 per cent. In Egypt and the Soudan the population was 14·73 millions. These figures are so vast that the mind almost refuses to grasp them, but they should never be left out of sight when it is a question of devising political expedients which must affect hundreds of millions instead of a few hundred thousand.

the question. A member, on the contrary, has to listen to the debates of both parties, and receives a certain amount of training in compromise.*

It is over questions of detail rather than over questions of principle that the real struggle arises. To appeal to the electorate with Bills and rival schemes in such a case is not merely to appeal to the uninstructed as umpires; it is to accept the judgment of "persons judging in the last resort and without a penalty in lieu of persons judging in fear of a dissolution and fully conscious that they are subject to an appeal." In the trade union constitutions, Mr. Webb says: "The use of the Initiative and the Referendum has been tacitly given up in all complicated issues and gradually limited to a few special questions on particular emergencies."

Further, it has been found that the Referendum in Switzerland is very expensive. The mere Governmental expenses of printing and taking of the vote in that small country comes to a comparatively large sum,† without reckoning the money spent by private societies in getting up the demand and in conducting the campaign.

To sum up. The objections to the Referendum are both theoretical and practical. It would be a very difficult constitutional change to introduce, and might easily become a powerful weapon for endless obstruction in the hands of the Opposition. If it were used in the case of a dispute between the two Houses in Great Britain it would lessen the disposition of either House to compromise in order to attain some result, and would materially add to the power of the Upper House. If the Referendum were started by a petition the country would be at the mercy of a machine for collecting signatures and getting up agitations. It would be almost impossible to put the question simply or to know whether the Act founded on the answer to that question really corresponded to the wishes of the voters if only the principle of the Bill were submitted. If the voting took place on the Bill itself there is still the objection that the ordinary citizen has neither the necessary leisure, documents, nor training to enable him to appraise the value of such a piece of work, especially as our legislation is now so specialised, technical, and, to a large extent, sectional.

* In Switzerland the difficulty of explaining the tenour of the law has been one of the principal reproaches levelled against the system. In some cantons explanatory messages are sent round to the electors with the laws to be voted on, but no one ever reads these explanations, as they are merely a panegyric of the wisdom and policy of the Government in passing such Bills.

† The vote on the Law of Bankruptcy cost the Government 130,000 francs. This is a large sum for a nation of 700,000 voters, whose habitual economy may be judged by the fact that the President receives a salary of £520 a year, and is not allowed to engage in any other profession or business while in office.

In its working the Referendum would probably follow party lines, like any election, and where parties are organised it is not likely that legislation would thereby be divorced from politics. The Referendum is certainly a great check, and it is natural that it should be so; it is so easy to find flaws in a finished work of which the voter approved in principle. We do not seem to suffer so much from over-legislation that we need the Referendum as a drag on the legislative wheel. The experience of Switzerland shows that people are unwilling to vote and to assume the responsibility of sitting in judgment on proposed measures, and that they are more interested in elections than in voting on laws. Furthermore, the Referendum leads to the Popular Initiative, which is a dangerous species of "legislative dynamite." The Referendum is apt to degrade the position of the Legislature in the eyes of the people, and to lessen the legislators' sense of responsibility. Finally, the Referendum is more or less unnecessary in a country like the United Kingdom, where popular opinion can and does make itself felt at certain intervals by means of general elections. To introduce the Referendum in such a case would be somewhat like buying a good watchdog and sitting up all night and every night to see that he barked properly.

We have a Parliamentary system which has been copied by all the West European States. Nowhere has it worked so well as in England, which seems to point to the fact that borrowed institutions are not apt to be successful. Our constitution is the result of century-long growth, and has adapted itself to the government of a great Empire. The Referendum is subversive of the Parliamentary system which we have found so satisfactory on the whole. The smaller the country the easier the problem of its government. We ought to hesitate before introducing even the successful political expedient of small Republican states into a large and powerful monarchy with world-wide interests and ambitions, and the Referendum has proved itself by no means a perfect instrument even in those small states. While it has much to attract those whose watchword is "government of the people, by the people, and for the people," the investigation of its practical working makes us "rather bear those ills we have than fly to others that we know not of."

Railway Rates and Charges.

BY J. MARTIN KNIGHTS, F.S.S.

I.—PAST.

UP to the latter part of the 18th century roads were the chief means of transit. Unfortunately these were generally in a very bad state, often impassable to the heavy, cumbrous wagons drawn either by six or eight horses that conveyed the goods of the time. From the main roads bye-roads were constructed leading to the mines, quarries, canals, &c., which were opened up. These bye-roads were generally of the worst kind, and we find wagon owners laying either parallel smooth stones or baulks of timber lengthways along the road, so that their wagons might reach the main road quickly and with less labour. This was the mediæval *railway*. In 1767 an iron manufacturer suggested the plan of using iron tracks in place of stone and timber. Nine years later the canal companies were authorised to build these railways in order to facilitate the transport of goods to and from their waterways. At this time long distance traffic by road was almost unknown and extremely costly. For example, the cost of conveyance between London and Exeter was £12 per ton.

Early in the present century a Nottingham expert proposed a great extension of the railways, but public opinion was adverse, and little progress was made. There was at the time a spreading network of roads in the kingdom, along which commerce was developing, but charges were enormously high.

The first chartered railway, a short road for use by horses, was sanctioned in 1801, and ran from Wandsworth to Croydon. In 1804 a crude steam locomotive drawing some ten tons at a time was actually at work at a Welsh ironworks. In 1821 the Stockton to Darlington Railway was opened, and was at first worked by horses; goods were charged one-fifth of a penny per ton per mile. Steam traction was applied at a later date, and the rate then for coal for home consumption was ½d. per ton per mile; for export, 4d. These charges appear to have been for the use of the road only. The only London railway open at the accession of the Queen was one worked by ropes, between the Minories and Blackwall.

The present system of railways owes its origin to the famous inventions of George Stephenson, and his "Rocket," built for the Liverpool and Manchester Railway, in 1823, was the first really practical locomotive. From that time railway companies were rapidly formed, railway building proceeded very quickly, and the roads, locomotives, rolling stock, &c., have been steadily improved up to their present high standard.

With the early railways it was intended that the companies should own the actual road, and allow the public the use; the railway company charging only a road toll. In 1823 the railway companies acquired legal power to provide steam engines for locomotion, and where provided an additional charge could be made under the head of "Locomotive Power Toll." Up to 1838 engines belonging to traders were run upon the Liverpool and Manchester Railway, and it was recommended that the Post Office should adopt the same means. This system, however, quite died out within the next few years.

In 1833 the railway companies obtained powers to provide the whole of the rolling stock, with officials to regulate the systems and convey the goods. The railway companies were authorised to charge for this service under the head of "Rolling Stock Toll."

The actual tolls chargeable for locomotive power and rolling stock were not legally fixed. The Legislature expected that competition would arise between the carrying companies, and, therefore, only required that the tolls should be reasonable.

For many years the work of carrying merchandise upon some of the railways was actually performed by large firms of carriers, such as Messrs. Pickford and Co., who provided the siding accommodation and goods stations. As an instance the London and Birmingham Railway (opened in 1838, and now the great London and North-Western Railway Company, an amalgamation of about forty small lines) did not warehouse London goods at first. This was done by Pickford and Co.

In the early years a rough classification of goods, borrowed from the canal companies, existed, and there was a clause in the Railway Acts enforcing equal mileage tolls. It was soon found that the exigencies of business needed greater freedom, and a clause was inserted later in the Acts giving the railway companies power to vary tolls. In the old Acts coal in some cases was chargeable at 8d. per ton per mile for road toll only, against $\frac{3}{4}$d. per ton per mile in other Acts. In 1839 Mr. Gladstone claimed the right of Parliament to revise tolls. In 1842 some supervision over railways was given to the Board of Trade, and in 1844 a Parliamentary Commission decided that tolls were too high, but stated that competition between companies would be harmful.

An Act was passed which gave the Legislature power to regulate tolls under certain circumstances. At this time some of the leading lines were paying 10 per cent to 15 per cent dividend, and the capital cost per mile of railway was half the present amount.

In 1845 the exclusive right to use the railroad was practically granted to the railway companies, excluding the traders and carriers, who had now quite ceased to run their own engines, chiefly on account of the high tolls demanded. The carriage of small parcels of goods was, however, the cause of keen competition between the carriers and the railway companies, and had it not been for a clause known as the "Equality Clause" in the Acts, demanding equal treatment, the carriers would soon have been crushed. With general goods, carriers like Pickford, Parker, and Chaplin contented themselves with the collection and the delivery. *In 1845 the Maximum Rates clause was introduced, which limited a railway company's total charge for conveyance to less than the aggregate of the three previous tolls (road toll, locomotive toll, and rolling stock toll).* In this we have the foundation of our present "Conveyance Rate."

At this period the amalgamation of railway companies was causing some alarm. The Board of Trade made a report to Parliament on the subject, taking the ground that it was right for continuous lines but not for competing lines, and suggested that where power to amalgamate was granted the opportunity should be taken to modify the existing powers of the railway companies.

A matter that attracted attention in 1845 was the competition between railways and some canals. With a view to giving encouragement to canals, an Act was passed giving them the same power to vary tolls as railways. A further Act gave canal companies power to become carriers, and to make working arrangements with other canal companies.

A Parliamentary Committee was appointed in 1846 to consider the expediency of allowing amalgamation of canals and railways. The Committee justified amalgamation, but recommended that an Executive Department should supervise both railways and canals. Thus was established the "Railway Commission," which continued till 1851, when, owing to the opposition of the railway companies, its duties were transferred to the Board of Trade. The Committee reported that a revision of railway rates was imperative.

A number of Acts authorised companies to make undefined charges for "terminals," *e.g.*, loading, unloading, &c., and it was generally understood that railways could make charges by agreement for warehousing, wharfage, demurrage, cartage, &c.

The Railway Clearing House was voluntarily created in 1847, and a legal status given it in 1850. In 1847 5,000 miles of rail-

way were open, and in 1850 1,560 miles were abandoned, as the promoters could not complete them. In the same year Mr. Gladstone arbitrated between three large railway companies on the question of division of traffic.

In 1853 the question of railway amalgamation was again brought before a Committee, known as the Caldwell and Gladstone Committee, which recommended a revision of rates, through traffic, and just facilities. The London and North-Western and Midland Railway Companies were at this time trying to amalgamate, and they contended that, to carry out the principle of through traffic, amalgamation was necessary. An Act was introduced, however, compelling both railway and canal companies to accept through traffic; hence *our through rates.*

The 1854 Act also contained an extension of the Equality Clause. This was inserted mainly owing to the struggle which had existed for a number of years between the railway companies and the carriers for parcels traffic. The railway companies claimed to apply a different system of charging the carriers' traffic, and also not to allow a rebate for cartage. The first difficulty was complicated by a clause in the Special Railway Acts known as the "Small Parcels" Clause, which authorised a railway company to charge a different sum for packages under a given weight. On this authority the railway companies had established a Small Parcels Rate, as well as a Tonnage Rate. The contest was only ended by the decision of the House of Lords in 1869. The decision instructed the railway companies to charge the carriers on the aggregate weight of the number of parcels enveloped—irrespective of the ultimate destination of each parcel—and to allow a rebate for cartage.

Up to this time the railway companies had incurred in Parliamentary expenses about £70,000,000 in opposing rival schemes.

In 1858 it was found necessary to prevent the further control of the canals by railway companies, and an Act was passed for this purpose.

Meetings were held in 1859–60 between the representatives of the railway companies and the Chairmen of Parliamentary Committees to discuss the question of charges for terminal services. A model Terminal Clause was drawn up to be inserted in future railway Bills, the total terminal charges being limited to 2s. per ton on goods and 9d. per ton on minerals. This arrangement met with strong opposition from the public, and was withdrawn.

In 1863 strong complaints concerning the charges of the railway companies were made, and Parliament was urged to guard the traders' interests.

In 1864 the Railway Construction Facilities Act was passed, enabling companies to make unopposed lines without the consent of Parliament. This Act has been inoperative owing to the opposition of the rival companies, which made application to Parliament necessary. This Act also gave power to companies to charge a reasonable sum for terminal services.

In 1865 a Royal Commission sat to inquire into the charges of the railway companies, and it was decided that no legislation was necessary so long as the railway rates were within their legal maximum.

A traders' agitation arose in 1867 on the railway rates, and a Royal Commission inquired into the British rates as compared with those charged in several foreign countries. The Commission thought that the greatest grievance lay in the British terminals, and that such charges should be based on the actual expenses. They recommended a revision, and were of the opinion *that terminals charged by the railway companies under "Station Terminals" were included in the conveyance rate.*

The same Commission established the very significant fact that *competition in rates did not exist* between railways. They reported that the complaints of the traders were well founded. As a result, the Railway Commission was established as a *permanent* tribunal owing to the increasing dissatisfaction in the country.

In 1868 the Regulation of Railways Act was passed, which required a railway company to furnish, on application, an account distinguishing the conveyance rate from the terminal charges.

In 1872 most of the rates for carriage of goods, which were operative until 1893, were put in force by the railway companies.

An Act passed in 1873 imposed upon the companies the duty of publishing rates in the station books. The Act gave power to any company to propose a through rate to another company at less than the sum of the local rates, and, in case of disagreement, the Railway Commission was to decide whether or not the rate should be allowed and the division of such rate between the companies concerned. Parliament did not schedule in this Act a scale of maximum terminal charges.

The Act also required any railway company owning a canal to keep such canal in good working condition, and forbade any canal rates or traffic passing under a railway company's control without the sanction of the Railway Commission. Parliament did not see fit to enforce the Railway Clearing-house Classification. The above Act was operative until 1888.

In 1881 the terminal question assumed a different form. Traders complained that the charges for short distance traffic were beyond

the maximum powers of the railway companies. The companies stated that this was owing to the terminal charges. The traders then contended that the powers of a railway company to charge for terminals were limited to the services specified in each railway company's Act, also that where an Act contained no reference to terminals all charges were covered by the maximum rate. The railway companies' special Acts certainly differed in these terminals, some enumerating more services than others, and some containing no reference to terminal charges. The point of contest was evidently with the charge known as "Station Terminals." The old Railway Acts authorised the companies to erect toll houses; the adjoining landowners were permitted to erect warehouses and to charge for their use. Later, depôts for goods were built by carriers, the actual railway station being for passengers only. When the companies became general carriers it was necessary for them to have buildings for the accommodation of their goods traffic, so that the present railway goods station is the carriers' depôt *plus* railway toll house. The London and North-Western Railway Company spent in construction of goods stations in London, Manchester, and Liverpool over £5,000,000.

It would seem that the public has always paid terminal charges either to a landowner, carrier, or railway company. In this year (1881) the services specified under terminals were:—Loading, unloading, covering, uncovering, checking, invoicing, watching, marshalling and shunting particular trucks, warehousing (in the sense of taking charge of goods until the train was ready to start, and until delivery could be effected at consignee's end), collection, and delivery. Terminal charges are, therefore, to cover interest on capital expended on land, buildings, machinery, sidings, cartage, &c., and the provision of clerical and manual labour, &c. They can be further arranged—

(*a*) Station (structural, &c.) terminals.

(*b*) Service (handling) terminals.

(*c*) Cartage terminals.

The Parliamentary Committee of the year, formed to inquire into the dissatisfaction expressed at the rates, recognised the right of the railway companies to charge terminals, but the Committee held that the trader should be protected from excessive charges. Preferential rates were discussed, and were justified by the Committee, as they prevented local monopolies. The lower rates to seaports were contested by the inland towns, but the Committee held that to annul these rates would only benefit the steamboat companies.

The Committee recommended, amongst other points, that power should be given to the Railway Commissioners to order through rates on the application of traders.

Nothing was done by Parliament about the points under notice until the Bill of 1884, brought in by Mr. Chamberlain, granting a right of appeal from the decisions of the Railway Commissioners, and authorising railway companies to charge for station terminals in all cases where railway companies were willing to submit to a revision of their classification and maximum rates. The railway companies strongly opposed this, and the Bill was withdrawn. Then the principal railway companies voluntarily revised their classification and maximum rates, and private Bills were introduced authorising terminal charges, but these Bills were also withdrawn.

In 1886–87 Bills were proposed by the Government, and the principles were eventually embodied in the Act of 1888. This Act appointed a new Railway Commission, with the full rights of a Superior Court. The Commission was to enforce, among other points—

(*a*) The co-operation of companies.

(*b*) Provisions relating to private sidings.

(*c*) Through rates.

(*d*) Adjustment of rates on canals controlled by the railway companies when excessive charges were made to divert traffic from the canals.

Under this Act traders or local bodies could suggest through rates. A revision was to be made within six months by all railway and canal companies of their maximum rates and classification, to be submitted to the Board of Trade for approval. The basis of terminal charges was to be the expenditure reasonably necessary for the accommodation provided, and not of the actual outlay incurred. (At this time terminals averaged 20 per cent of the total rate.) Companies were required to keep for sale the Classification Book and Schedule of Maximum Rates. It was obligatory to keep Rate Books at the stations for inspection by the public, and, in the case of traffic by sea and land, the Rate Book to show the proportion for each. Traders could claim under this Act for the conveyance rate to be distinguished from the terminal charges, and no increase was to be made without publication. Group rates were legalised. The Act prohibited preferential rates in favour of foreign merchandise.

The Act required an effective system of through rates between railways, and it prevented the further control of canals passing into the hands of the railway companies. Further, the canal companies were authorised to establish a Clearing House.

The various Railway and Canal Companies Acts fulfilling the Act of 1888 were passed during the years 1891–92, and a particular point is that station terminals are definitely legalised.

On January 1st, 1893, the railway companies directly increased their rates up to their maximum powers. Traders generally contested the increases, and the railway companies subsequently modified the increases to about 5 per cent over the 1892 rates. Indirect increases were also made.

But under the 1894 Act the railway companies are required to prove to the satisfaction of the Railway Commissioners that the increase of any contested rate is reasonable. This, in fact, makes a railway company prove the necessity for increasing any rates.

Consequently a case was fought out on the charges between London and Northampton, with the understanding, on the traders' part, that the result would be of general application, but the railway companies would not concede this, and now on the traders' side the Mansion House Association has brought the case of Smith and Forrest *v.* Railway Companies before the Railway Commissioners to decide on the whole of the increases made. This covers—

(*a*) Rates, increases since 1892.

(*b*) Smalls, increases since 1892.

(*c*) Decrease in cartage rebates.

(*d*) Increase in empties rates.

(*e*) Question of railway not allowing cartage rebate on some C. and D. traffic.

(*f*) Question of railway companies allowing, in some cases, less cartage rebate than is put on for cartage over the tonnage rates.

The evidence has not been completed at the time of writing, but the basis of the railway companies' case has been increased expenses per ton. When, however, the facts of an increase in expenses were examined the companies had to admit that they based their statement on estimated figures; on actual figures the expenses for goods traffic showed a decrease per ton. The companies made a special point at the recent hearing of the tendency of traders to send consignments of goods of less weight than heretofore, causing them much more expense. Twenty-five per cent of the total consignments are 3cwt. or under, and, therefore, come under what is technically known as "smalls." The traders point out that the smalls is a remunerative business for the railways, so that this tendency should be welcomed by the companies.

II.—PRESENT,

With Some Comparisons and Comments.

Goods are divided into eight classes, and the classification is known as the "working" or "Railway Clearing House" classification, in contradistinction to the "maximum" or "Parliamentary" classification. The two classifications differ in some details. The old Acts generally classified goods under three classes—lowest, medium, and highest. Lime, coal, manure, &c., were included in the lowest class; bricks, grain, timber, &c., in the medium class; and about fifty articles in the highest class.

The companies may not exceed the maximum conveyance rates and station and service terminals given for each class in the 1891–92 Confirmation Acts. They can make a rate under the maximum providing that any trader on the railway is allowed the same lower rate under the same circumstances.

The rates are made, it is stated, to depend primarily on eight considerations, viz.:—

(1) Value of article.
(2) Universality of consumption or use.
(3) Comparative bulk.
(4) Difficulty of handling.
(5) Risk of damage.
(6) Development of business.
(7) Distance of journey.
(8) Rival routes.

Thus the railway companies contend that they charge rates in accordance with what traffic will bear. The same principle lies at the root of our taxation, and was in operation on the turnpike roads. The Great Western Railway Company first declared this principle for regulating their charges.

The principle manifestly makes those pay who can, or, in other words, "maximum cost for maximum benefit;" but the traders have described this as the "bleeding to death" system.

In the United States the rate for grain is fixed really by the markets of the world, and is now usually regulated by the prices ruling in our Liverpool market. The American railways are compelled to carry the grain at a rate which will enable producers to compete in the Liverpool market with the East Indian and Black Sea producers. So widespread is the competition that the transit charges in the East Indies have influenced the railway rate from Chicago to New York.

The railway companies say that cost of service could not be the basis of rates. How is the cost of service to be ascertained? Equal mileage charge has been put forward, but this is unpractical, as it would shut traders out of distant markets and increase monopoly. In Germany and Holland this system obtains on paper, but it is only on paper; so many exceptions are made.

Through rates and rates between towns served by more than one company are governed by two railway conferences—(1) the English and Scotch Conference; (2) the Normanton Conference.

In accordance with the explanations set forth in the first part of this paper, a through rate is made up of—

Road Toll .....
Locomotive Power Toll.... } = Conveyance Rate.
Rolling Stock Toll .....

Loading Charge .....
Unloading Charge .....
Covering Charge.....
Uncovering Charge ..... } = Service Terminal Charges (at each end of journey).

Station Accommodation ... } = Station Terminal Charges (at each end of journey).

The conveyance + service + station charges make what is technically known as a Station to Station (S/S) Rate. Where the company collects and delivers, or undertakes this obligation, it is empowered to make additional charges; the rate then becomes Collection and Delivery (C/D), and covers all charges. Traders can ask the railway company to give the composition of a through rate, *i.e.*, each of the charges separate. Rates for Class A traffic are generally exclusive of trucks, except in Scotland and on the North-Eastern Railway Company's lines for local traffic. A and B classes of traffic bear no service terminal charges if such services are performed by the trader, as is frequently the case.

A railway company cannot be compelled to work a private siding, the utmost required of a company being facilities for its working by the owners of the private siding. The owners of private sidings are entitled to have their traffic carried without any charge beyond the ordinary mileage rates if they place their trucks as near to the junction with the main line as they can safely be brought. By a later Act of 1894 power is given to the Railway Commissioners to determine the rebate to be allowed on a private siding for station and service terminals.

All parcels under 3cwt. gross weight are technically known as "Smalls," and are charged for by the railway companies at a special scale known as the "Smalls." The principle dates back

as far as 1835, and is a source of exceptional benefit to railways. To make up the scale the Confirmation Acts allow a railway company to charge—

5d.	per package	in addition	to tonnage rate	when rate does not exceed 20s.
6d.	„	„	„	30s.
7d.	„	„	„	40s.
8d.	„	„	„	50s.
9d.	„	„	„	60s.
10d.	„	„	„	70s.
1s.	„	„	„	80s.
1s. 2d.	„	„	„	90s.
1s. 4d.	„	„	„	100s.
1s. 6d.	„	„	„	is over 100s.

The Mansion House Association on Railway Rates has analysed this "Smalls" scale up to the 150s. rate, and finds, after comparison with the previous scale (fixed in 1877), that—

3,439	charges	(or 69·54 per cent)	are increased.
476	„	(or 9·63 „)	are decreased.
1,030	„	(or 20·83 „)	are the same.

The largest number of increases, viz., 511, occur on rates from 85s. 11d. to 111s. 8d. The smallest number of decreases is on rates from 111s. 9d. to 150s., viz., eight, and the largest number of equalities is on rates up to 12s. 11d., viz., 273. An investigation of the present "Smalls" scales yields an astonishing result. Taking the 3s. 4d. tonnage rate it is found:—

Weight.	Amount Paid by Trader.	Proper Charge.	Increase per Cent through operation of Smalls Scale.	Real Tonnage Rate paid by Trader.	Excess Paid per Ton through operation of Smalls Scale.
cwt. qr. lb.	s. d.	s. d.		s. d.	s. d.
0 2 0	0 6	0 1	500	20 0	16 8
1 0 0	0 7	0 2	250	11 8	8 4
2 0 0	0 9	0 4	125	7 6	4 2
3 0 0	0 11	0 6	83	6 2	2 10

The 20s. tonnage rate gives:—

Weight.	Amount Paid by Trader.	Proper Charge.	Increase per Cent through operation of Smalls Scale.	Real Tonnage Rate paid by Trader.	Excess Paid per Ton through operation of Smalls Scale.
cwt. qr. lb.	s. d.	s. d.		s. d.	s. d.
0 2 0	0 10	0 6	67	33 4	13 4
1 0 0	1 4	1 0	33	26 8	6 8
2 0 0	2 5	2 0	21	24 2	4 0
3 0 0	3 5	3 0	14	22 9	2 9

The 30s. 1d. tonnage rate gives:—

Weight.	Amount Paid by Trader.	Proper Charge.	Increase per Cent through operation of Smalls Scale.	Real Tonnage Rate paid by Trader.	Excess Paid per Ton through operation of Smalls Scale.
cwt. qr. lb.	s. d.	s. d.		s. d.	s. d.
0 2 0	1 5	0 10	70	56 8	26 7
1 0 0	2 2	1 7	37	43 4	13 3
2 0 0	3 8	3 1	19	36 8	6 7
3 0 0	5 2	4 7	13	34 5	4 4

The 90s. tonnage rate gives:—

Weight.	Amount Paid by Trader.	Proper Charge.	Increase per Cent through operation of Smalls Scale.	Real Tonnage Rate paid by Trader.	Excess Paid per Ton through operation of Smalls Scale.
cwt. qr. lb.	s. d.	s. d.		s. d.	s. d.
0 2 0	3 5	2 3	52	136 8	46 8
1 0 0	5 6	4 6	22	110 0	20 0
2 0 0	10 0	9 0	11	100 0	10 0
3 0 0	14 6	13 6	7	96 8	6 8

The 150s. tonnage rate gives:—

Weight.	Amount Paid by Trader.	Proper Charge.	Increase per Cent through operation of Smalls Scale.	Real Tonnage Rate paid by Trader.	Excess Paid per Ton through operation of Smalls Scale.
cwt. qr. lb.	s. d.	s. d.		s. d.	s. d.
0 2 0	5 3	3 9	40	210 0	60 0
1 0 0	8 6	7 6	13	170 0	20 0
2 0 0	16 0	15 0	7	160 0	10 0
3 0 0	23 6	22 6	4	156 8	6 8

"Smalls" thus give a great advantage to the railway companies, and it is strange that the railway companies look with uneasiness at the tendency of trade in this direction. Twenty-five per cent of the British traffic is "Smalls," and on this proportion the traders pay considerably more than is represented in the tonnage rate. The traders have got a revised and reduced scale put into operation between London and Northampton, by judgment of the Railway Commissioners, and the contest at present before the same authority is to enforce a similar judgment applicable to the whole country. The colonies have mostly followed the Mother Country with special "Smalls" scale. Foreign countries

"WASTE" in 1898.

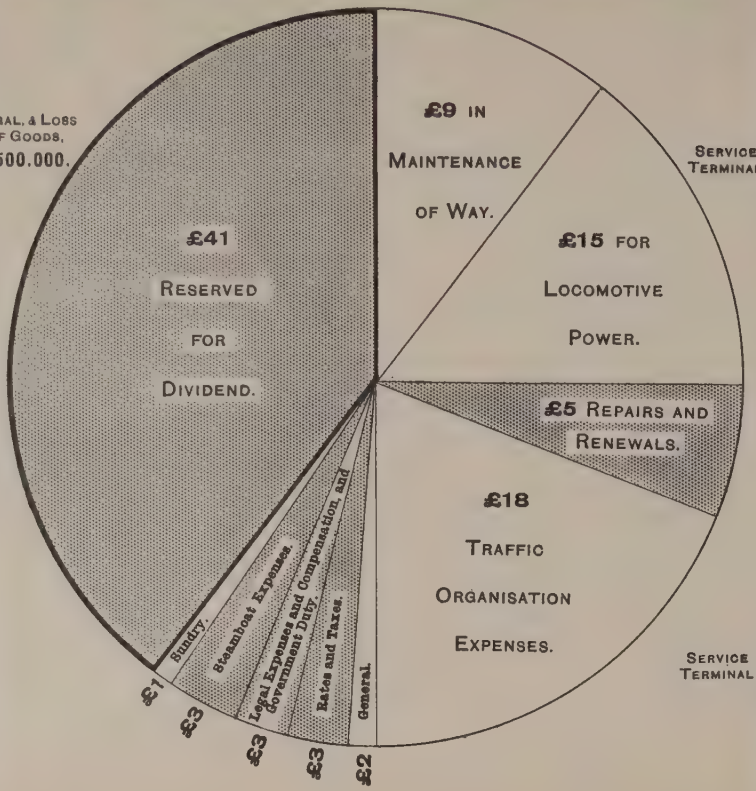
Traders paid the Railways in 1898, **£47,600,000** for Carriage on Goods—of this, **£18,500,000** was wasted.

Waste in unnecessary facilities through Railway Competition for Traffic, £10,000,000.

Waste in Interest on Excess Capital, say: £8,000,000.

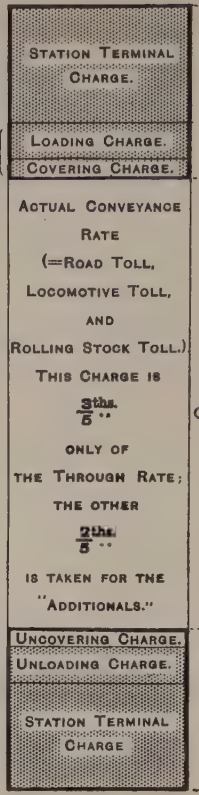
Estimated Fair Cost of the services rendered, viz., £29,100,000, which would allow a Reduction of 39% off Rates.

How every £100 of Total Receipts by a Railway Company is spent.


£41 Reserved for Dividend.
Legal, & Loss of Goods, £500,000.
£9 in Maintenance of Way.
£15 for Locomotive Power.
£5 Repairs and Renewals.
£18 Traffic Organisation Expenses.
£1 Sundry.
£3 Steamboat Expenses.
£3 Legal Expenses and Compensation, and Government Duty.
£3 Rates and Taxes.
£2 General.

The Apportionment of a Traders' Rate based on Class C Goods from Leith Station to Grangemouth Station.

Total Through Rate is **6s. 3d.** per ton. Terminals cost **2s. 6d.** of this.


Station Terminal Charge.
Service Terminal
Loading Charge.
Covering Charge.
Actual Conveyance Rate (=Road Toll, Locomotive Toll, and Rolling Stock Toll.) This Charge is 3ths. of 5 ..
3/9 only.
only of the Through Rate; the other 2ths. of 5 .. is taken for the "Additionals."
Service Terminal
Uncovering Charge.
Unloading Charge.
Station Terminal Charge

have really no such scale unless "under truck loads" can be taken as "Smalls," or in Belgium where one classification is for goods under 4cwt. British railways justify the extra charge for these small packages on account of the extra labour entailed, but it is open to question whether the extra expense reaches the excess that the companies charge and are paid. The scale is not applicable to local Scotch traffic. The scale for Scotland differs slightly.

The business of parcels by passenger trains is included by the railway companies under passenger traffic receipts. The railway companies are under no compulsion to carry any parcels by passenger train other than perishables. The rates allowed in the Confirmation Acts are for services from station to station only; but the railway companies usually quote to collect and deliver.

Taking 40/56lb. parcels, the following are the charges by the Great Northern Railway Company contrasted with other countries on meat, fish, butter, and eggs, at company's risk per ton :—

	Conditions.	10 Miles.	25 Miles.	50 Miles.	150 Miles.
		s. d.	s. d.	s. d.	s. d.
Gt. N'th'n Rly. Co.	Collected & Delivered	46 8	46 8	93 4	186 8
„ „	*Station to Station..	36 8	36 8	83 4	176 8
India	„ „ ..	18 8	18 8	37 4	75 0
South Australia..	„ „ ..	20 0	26 8	33 4	60 0
Natal	„ „ ..	28 4	43 4	50 10	103 4
Queensland.....	„ „ ..	40 0	40 0	40 0	100 0
Victoria	„ „ ..	40 0	40 0	70 0	160 0
Transvaal	„ „ ..	22 6	33 9	45 0	101 3
Orange Free State	„ „ ..	53 4	53 4	116 8	226 8
Cape.....	„ „ ..	26 8	26 8	56 8	113 4
New Zealand	„ „ ..	70 0	70 0	93 4	173 4

* 10s. per ton has been deducted for cost of collection and delivery.

Also—

PARCELS AT OWNER'S RISK BY PASSENGER TRAIN. PER CWT.
FISH, MEAT, AND VEGETABLES.

	Conditions.	10 Miles.	25 Miles.	50 Miles.	150 Miles.
		s. d.	s. d.	s. d.	s. d.
Gt. N'th'n Rly. Co.	†Station to Station..	0 11	0 11	2 1	4 5
Gt. E'st'n Rly. Co.	† „ „ ..	0 6	0 6	2 1	2 1
Natal	„ „ ..	0 11	1 7	1 10	3 6
Queensland	„ „ ..	1 0	1 0	1 0	2 6
India	„ „ ..	0 6	0 6	0 9	2 3

† Actual rates include one cartage, so 5s. per ton has been deducted.

The maximum scale in the Confirmation Acts and the Great Northern Railway Company's scale show a very remarkable comparison. The railway company reserves for collection and delivery expenses the difference between the two tables.

Distance.	Maximum Charge per Ton, as per Acts.	G.N.R. Charge per Ton.	Difference is for Collection and Delivery per Ton.
Miles.	s. d.	s. d.	s. d.
10	40 0	46 8	6 8
25	40 0	46 8	6 8
50	47 6	93 4	*45 10*
150	75 10	186 8	*110 10*

NOTE.—The maximum charge is station to station only. The Great Northern charges include collection and delivery.

Cartage is a form of terminals which is not controlled by law, and the railway companies occasion injustice in several ways. A number of traders use their own conveyances for delivering and collecting goods from and to the goods stations, and it follows that, where a rate covering this collection and delivery is paid to the railway company, the trader who carts claims that the cartage portion of the charge should be remitted as the railway company has not performed the cartage services. The railway companies in many cases allow no rebate, and in other cases allow less back than is paid them. There is a recognised scale of the cartage allowance (known as "rebate") for each class of goods, but when the railways make a special low rate they reduce the amount to be paid back to the trader, and sometimes more in proportion than their share of the charges. To illustrate this the following instance which came under notice recently will be useful:—

From	To	Goods.	Ordinary Rate, including the Charge for Collection and Delivery.	Portion kept by Railway.	Portion given to Trader for London Cartage Allowance.	Exceptional Rate, including Charge for Collection and Delivery.	Portion kept by Railway.	Portion given to Trader for London Cartage Allowance.
			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
London	Newcastle	Tea	52 6	47 6 =90½%	5 0 =9½%	38 6	35 6 =92½%	3 0 =7½%

The arbitrary reductions in the traders' cartage allowance simply because the railway companies have chosen to make a

special low rate is justified by the railway companies on the grounds that they undertake the entire service, and any trader performing a portion of such service is the railway companies' agent and agrees to the railway companies' terms. The traders' complaints remain to be answered by the companies, and the test case before the Railway Commissioners will adduce important evidence on this subject.

The recognised cartage rebates per ton are as follows:—

	Class 1. Ordinary Rate.	Class 1. Special Rate.	Class 2. Ordinary Rate.	Class 2. Special Rate.	Class 3. Ordinary Rate.	Class 3. Special Rate.	Class 4. Ordinary Rate.	Class 4. Special Rate.	Class 5. Ordinary Rate.	Class 5. Special Rate.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
London	3 9	2 6	4 2	2 9	5 0	3 0	5 10	3 4	6 8	4 0
Manchester	1 6	..	1 6	..	1 9	..	2 3	..	3 3	..
Newcastle	1 0	..	1 0	..	1 0	..	1 0	..	1 0	..
Northampton	1 4	0 10	1 8	1 0	2 0	1 4	2 6	1 8	3 4	2 0

Most Northern towns, 10d. per ton when rate is up to 8s. 4d., 1s. per ton when rate is from 8s. 4d. to 12s. 6d., 1s. 6d. per ton when rate is over 12s. 6d.

Preferentials are low rates quoted specially, and have been the subject of inquiry and contest in every country. Generally they are quoted—

(*a*) To compete with shipping companies;

(*b*) For large consignments of goods; or,

(*c*) For export and import goods,

having always as an end the creation, the sustentation, and the development of markets to the railway company's advantage. The justification of these rates is that the business cannot usually be had on other terms, and under these circumstances any rate "pays" which covers the expense of moving and handling goods. However, were these low rates applied indiscriminately throughout the railway system the result would possibly leave the railway companies with no margin of profit. It is manifest that inland towns entirely dependent on a railway have more advantages from a railway than towns which can use an alternative route, *e.g.*, the sea. To the former the railway is the sole means of transit, and the railway company claims full remuneration. The town with the alternative route is not entirely dependent on the railway, and the railway company cannot claim remuneration much in excess of the rates operative on the alternative route. The cost to the railway company per ton when the goods are in large consignments is obviously less than the cost per ton on goods when in small consignments.

Preferential rates on export goods are quoted with a view to developing trade—many goods could not be moved to foreign countries unless these rates were in force.

Preferential rates on import goods are usually quoted for large consignments, and to meet the competition of shipping companies. France has sent goods through Kent at preferential rates to the erroneously assumed disadvantage of local traffic with London. By the abolition of the preferential rates the shipping companies alone benefit, as the shipping companies can carry the goods direct to the port of London. Preferential import rates on wheat from America *viâ* Liverpool to London supply another instance, as the wheat can be brought direct to London by water. In France traders have complained that the products of Africa, which can be sent by sea, have passed through France by railway from Marseilles to other countries at lower rates than the interior traffic, and that rates for imported goods from Dunkirk or Boulogne to Paris were lower than the rates for French goods from intermediate stations. The United States, Austria, and Sweden permit preferential import rates. On the Continent preferential rates are also quoted in competition with other railway rates, and in consequence of this practice German traders have complained of goods from Hungary passing through Germany to England at lower rates than were charged to distribute home produce. Competition for coal traffic also forced low rates, especially for intermediate traffic. The railways were obliged to quote these low rates.

Belgium has a distinct class of low rates. Part of the railway system is worked by the State and part by companies. The companies competed for traffic, with the result that the State lines had to quote low rates to get business. By this competition rates fell 33 per cent. The Cape, Natal, and New Zealand give preferential rates for local traffic—their situation and development do not render them liable for preferential import rates. Italian traders complained of preferential rates, but the Committee of Inquiry decided that such rates strengthened national industries.

It is important to observe that the entire abolition of preferential rates would necessitate an increase in normal rates to compensate for loss experienced as a result of diversion of traffic or flatness of markets. Preferential rates were recognised in the very first Railway Act. The late Lord James described them as "the natural gravitation of trade."

Shipping affects the whole of Britain, and largely railway rates, but there is no law governing its rates. The traders are indebted in many ways to this branch of the transport business, but on some routes the shipping rates are largely fixed by the railway companies

and shipping companies combined in what is known as a Conference. The element of competition does not exist in these cases. A result of this combination is that one portion of the traders, for the sea part of the journey, has to pay more than another. We may illustrate the shipping companies between London and the Yorkshire ports. These companies take goods at a through rate to cover the journey by sea and rail, the rail and shippng sharing the rate paid by the trader. On some of this traffic the proportion of the through rate retained by the shipping company is less than the ordinary charge for sea transit, although the through rate remains the same. The balance is taken by the railway company to enable it to compete in other directions. The anomaly is that the traders nearer the seaports pay more for the water part of the service than the traders further inland, notwithstanding that the service is identical. This arrangement is aggravated by the influence that these railway and shipping combinations use in settling the cartage rebate for the London trader. The allowance is fixed purposely at less than the usual carting rebate, the reductions benefiting the railway company. By this method the London trader who carts his goods subscribes involuntarily to the revenue of the railway companies of Lancashire or Yorkshire.

The French railways have no Conferences of the foregoing nature with shipping companies. The Swedish railways, however, arrange rates with the large shipping companies at their ports. The Government of Denmark owns a merchant fleet, working in connection with the railways. The United States railways entirely own some of the shipping companies, and fix the rates of some of the waterways.

The following is a table of some of the present rates, which shows the saving by local shipping :—

Rail mileage.	From	To	Groceries.			Light Drapery.			Furniture.		
			Rail Rate.	Water Rate.	Saving.	Rail Rate.	Water Rate.	Saving.	Rail Rate.	Water Rate.	Saving.
			s. d.	s. d.	Per cent.	s. d.	s. d.	Per cent.	s. d.	s. d.	Per cent.
52	London.	Colchester....	23 9	16 0	33	28 4	19 4	32	33 4	26 8	20
183	„	Middlesbro' ..	52 6	20 0	61	67 3	30 0	55	80 7	55 0	32
262	„	Sunderland ..	52 6	18 6	65	74 2	30 0	59	87 6	30 0	66
400	„	Glasgow	72 6	42 6	41	100 0	40 0	60	119 2	81 8	31
413	„	Grangemouth .	70 0	42 6	39	100 0	43 4	57	119 7	85 0	29
1000	*Chicago.*	*New York.....*	*84 5*	*39 1*	*53*	*84 5*	*39 1*	*54*	*126 7*	*58 9*	*54*

Lard from New York to West Hartlepool docks is 17s. 6d. per ton, but the railway rate from West Hartlepool to Manchester is

21s. 4d. per ton. Lard from West Hartlepool to London by water —some 300 miles—is 9s. per ton. The railway charge from West Hartlepool to Stockton, eleven miles, is 7s. per ton. Flour is carried from Chicago to London, some 4,300 miles, for 34s. 9d. per ton, or $\frac{1}{10}$d. per ton per mile. A very exceptional instance of cheap water transit was the rate for coal by lake from Buffalo to Chicago during August, 1896, viz., 10d. per ton, on a distance of 700 miles, and the rate included loading and unloading. Freights between New York, or Philadelphia, and England on grain have fallen 37 per cent since 1880. Freights on wheat from San Francisco to England have fallen 60 per cent. From Odessa to England freight on wheat has fallen 45 per cent since 1880. Freight on rice, Rangoon to England, since 1881 has fallen 47 per cent.

Our canals, or "dirty ditches" to which they have been compared, offer no serious competition with our railways. This was felt to be so generally true that a Joint Committee of both Houses of Parliament declared their inability to offer any practical suggestion.

The canals date from the time of the Romans, who constructed the Caer Dyke and the Foss Dyke, but the period of public attention dates from the year 1566, when companies known as Undertakers were being formed for the purpose of improving navigation. In this year powers were given for cutting a canal by the side of the river Exe. The proper development of canals had to wait the introduction of locks, and this was effected in the 17th century.

The Aire and Calder Canal Act of 1699 gave powers to the proprietors to make the waterway navigable, and the tolls were to vary from 10s. to 16s. per ton for the entire course. An Act in 1720 allowed the improvement of the rivers between Manchester and Liverpool. In 1759 the Duke of Bridgewater was empowered to construct the canal from his coalpits to Salford. Seven years later the Grand Trunk Canal, connecting Liverpool, Nottingham, Hull, &c., was commenced. This canal passed into the possession of the North Staffordshire Railway Company in 1847. Other great developments in canal building were made preceding 1845.

The first business of the canal companies was merely to provide the waterways. In 1845 an Act allowed the companies to become carriers. The same Act allowed them to vary their tolls for the use of the waterways. At this period the process of combination of railway and canal companies created much alarm, and it was partially stopped by the Act of 1854. The Act of 1858 put further restrictions on these combinations. Any canals under the control

of a railway company were by the Act of 1873 to be kept in navigable condition. Under the authority of the Act of 1888 the canals introduced a uniform goods classification, tolls, and rates, which came into force on January 1st, 1895.

Belgium allows a free course over the greater part of her canals, and they offer serious competition to the railways. Germany has 8,654 miles of canal. The Kaiser Wilhelm Canal alone has cost £7,800,000, and the German Emperor has a great scheme in hand for the construction of a canal connecting large manufacturing towns.

France spends £7,000 per week for maintenance of canals and navigable rivers. There is a complete waterway across France.

Holland has 4,900 miles of canals and waterways, and in consequence of the severe canal competition railway companies have not been able to charge their full published rates.

Austria has 818 miles of canal and navigable rivers for steamers and 1,704 miles navigable for smaller vessels.

Canadian canals are national property, and coal is allowed free transit on some of them.

The United States has 3,400 miles of canals operated: 2,215 miles, costing £10,000,000, have been closed. The United States has experienced, like ourselves, the buying of canals by railway companies, and the 2,215 miles mentioned were shut by the railway companies after purchase. The competition of the canals is gradually diminishing. The following will effectively illustrate this tendency:—

	Year 1853. Tons carried.		Year 1897. Tons carried.
New York Canals.....	4,247,853	.....	3,617,804
,, Rails	360,000	.....	20,649,810
,, and Erie Rails .	631,039	.....	19,443,898

Canal transit is nearly useless for present trade, notwithstanding that rates could be 65 per cent under railway rates. Six canals probably are all that can be used for quick navigation. To put all the canals into navigable condition would cost £12,000 per mile. The antipathy of traders to canals as a means of transit is specially noticeable with the large corporations and new collieries situated on the side of canals, who give their traffic to the railway companies. We have 3,300 miles of canals in Britain other than tidal navigation, and 1,100 miles of these are controlled by railway companies.

III.—FUTURE.

An increase in the volume of traffic is carried at less than a corresponding increase in cost, *e.g.*, the maintenance of the roadway is not affected to an appreciable extent; the roadway must be kept in good condition whatever the traffic. To haul 50 tons of goods for one mile necessitates the consumption of 20lbs. of coal, but only 60lbs. is consumed in hauling 600 tons for the same distance. Organisation of traffic and the general expenses both bear the same application of diminishing expenses with increased returns. Thus it would seem that our greater density of traffic should give us an advantage over other countries in rates. The actual facts are:—

TON MILE AND DENSITY.

Country.	Tons of Goods carried over each Mile of Railway for Year, *i.e.*, Density of Traffic.	Average Charge per Ton of Goods carried One Mile, including all Charges except Cartage to and from the Stations.
		D.
Britain	20,205	2
Belgium	18,462	$\frac{9}{10}$
Germany	9,856	$1\frac{5}{10}$
Austria	6,828	$2\frac{5}{10}$
Holland	5,487	1
*United States	4,275	$1\frac{7}{10}$
France	3,958	$1\frac{8}{10}$
Japan	2,945	$1\frac{9}{10}$
Sweden	2,716	$1\frac{2}{10}$
Denmark (State Railways)	2,311	$1\frac{1}{10}$
New South Wales	1,677	$1\frac{9}{10}$
India	1,498	$1\frac{8}{10}$
*Canada	1,381	$1\frac{9}{10}$
Natal	1,321	$2\frac{8}{10}$
New Zealand	1,183	$3\frac{7}{10}$
Victoria	735	$2\frac{1}{10}$
South Australia	610	$3\frac{1}{10}$
West „	719	2
Cape	564	$2\frac{8}{10}$

*The average for the United States and for Canada would be less by taking into consideration the low wagon-load rates, but the wagons in question are so much larger than our own that the inclusion of those rates would be unfair.

The greater density of our traffic does not bring about a reduction in rates, the saving in this direction being more than neutralised by two serious considerations.

The first is the enormous capital cost of our railways, *e.g.*:—

COST.

Country.	Capital Cost of each Mile of Railway.	Country.	Capital Cost of each Mile of Railway.
	£		£
Britain	59,000	India	12,000
Belgium	29,000	Canada	11,500
Germany	20,000	Natal	14,000
Austria	16,000	New Zealand	8,000
Holland	21,000	Victoria	12,000
United States	12,500	South Australia	7,000
Japan	6,000	West „	4,500
Sweden	5 000	Cape	9,000
Denmark	31,000	Queensland	7,000
New South Wales	14,000		

The cost of railways per 1,000 persons is as follows:—

Country.	£	Country.	£
Britain	33,000	Germany	11,000
Belgium	13,000	Holland	8,000
France	16,000		

FURTHER DETAILS OF CAPITAL EXPENDITURE.

Railway Company.	Detail.	Amount.
L. & N.-W. Co.	Land Cost	Cost £6,300 per lineal mile.*
L. & S.-W. Co.	„ Compensation	„ £4,000 „
Midland Co.	„ Cost	„ £17,000 „ for many miles.†
G. W. Co.	„ „	„ £6,300 „
L.,B.,& S.C.Co.	„ „	„ £8,000 „

* London to Birmingham. † Leicester to London.

A large amount of rolling stock contributes its quota to this heavy capital of our railways, for with higher rates our railway companies draw a lesser result per wagon, owing to the excess number of wagons and the necessary greater distribution of the total receipts, *e.g.*:—

WAGON RECEIPTS.

Country.	Receipts per Wagon per Year.
	£
Britain	75
New South Wales	191
West Australia	153

Throughout Britain only 1½ tons are carried by each wagon every twenty-four hours; our wagons usually hold 10 tons.

To provide the dividend on our railways has taxed every mile of line £40 per week.

Our goods traffic realised last year nearly £47,600,000, and total receipts amounted to £92,000,000. Through the heavy capitalisation of the railways £38,800,000 was needed for paying dividend.

COMPARISON OF INCREASES.

Year.	Average Capital per Mile of Railway.	Average Goods Receipts per Mile of Railway.	Average Net Receipts for Dividend.
	£	£	Per cent.
*1869	34,200	1,470	4·22
†1872	36,000	1,835	4·74
‡1888	43,600	1,956	4·06
§1892	46,400	2,200	3·85
1898	52,400	2,270	3·55

* The railways in the following year made a considerable increase in rates, notwithstanding that their return on capital was good.
† In this year goods rates were fixed which were operative until 1893.
‡ This year saw the great Railway Act.
§ This year preceded the general rise in rates.

The main consideration when raising additional capital is to provide the dividend; this absorbs nearly half the receipts of a railway, and it follows that when the capital is increased the receipts for traffic practically need only increase by the amount required to meet the new dividend, as the other expenses are mostly stationary. It is clearly demonstrated in the above table that the traders have given the railway companies 54 per cent more receipts, and the railway companies have raised 54 per cent more capital, but only 27 per cent more receipts were wanted to meet the expense of dividend on the extra capital. Nearly all the other 27 per cent increased receipts was beneficial to the railway companies, and should have been used to reduce rates. But rates are increased and dividends decreased owing to the second item of consideration, viz., *unnecessary facilities*. These facilities are given the traders as a result of competition amongst railway companies for traffic, but the traders have to pay very heavily for any small benefit in this direction.

Our train loads compare with other countries as follows:—

Country.	Average Train Load.
United Kingdom	70 tons.
Belgium	96 ,,
France.....	121 ,,
Germany.....	132 ,,
United States.....	204 ,,

We have the greatest density of traffic, but our train loads are small in comparison with other countries. The railway companies are providing the traders with unnecessary trains; 90 per cent of mineral trains run by one of our largest railway companies are returned empty. Where there is more than the one railway company carrying goods between two points there is no competition in actual rates, *e.g.*:—

London to Liverpool.	Class 1 Goods.	Class 2 Goods.	Class 3 Goods.	Class 4 Goods.	Class 5 Goods.
	s. d.	s. d.	s. d.	s. d.	s. d.
L. & N. W. Railway Co.	28 10	34 1	39 4	52 6	66 5
G. N. Railway Co.	28 10	34 1	39 4	52 6	66 5
Midland Railway Co. ..	28 10	34 1	39 4	52 6	66 5
G. C. Railway Co.	28 10	34 1	39 4	52 6	66 5
G. E. Railway Co.	28 10	34 1	39 4	52 6	66 5

The shortest route is by the London and North-Western Railway Company, and it is stated that the one railway company has sufficient rolling stock to carry all the goods between the two points. Traffic from London to Norwich is carried by the Great Eastern Railway Company or by the Great Northern Railway Company at the same rate. The Great Eastern Railway Company is much the shorter route.

The Midland Railway Company canvasses for traffic from London to Gloucester, and charges the same rates as the Great Western Railway Company. The Great Western Railway Company runs the goods direct across the country; the Midland Railway Company has to carry them to Gloucester *viâ* Birmingham.

When two or more railway companies carry goods between towns they often arrange a division of receipts which is technically known as "pooling." This "pooling," or division, is generally based on the previous year's business of each line between the stations. By this means there is no competition in rates, but where "pooling" is not practised the companies arrange rates. The only competition of railways in Britain is in the provision of trains, canvassers, and other facilities. France saw the waste which would accrue from these methods, and laid down very orderly plans; each railway now has its own district, all conveying to her centre, viz., Paris.

Legal expenses form a considerable item in the accounts of a railway company; nine large companies in 1897 spent nearly £184,000. The British railway companies paid as legal expenses during 1898 £290,000. The expenses incurred in promoting and opposing railway Bills between 1872 and 1882 were £4,000,000.

The legal expenses of the Great Western Railway Company have equalled £1,000 per mile, and the London, Brighton, and South Coast Railway Company's £3,000 per mile. The solicitors' bill for the South-Eastern Company was £240,000. The Parliamentary cost of the Brighton Railway Company has averaged £4,800 per mile, and of the Blackwall Railway £14,400 per mile. The Great Northern Railway Company's Parliamentary legal expenses before the construction of the railways were £420,000.

We have thus two distinct items of waste—

(*a*) Excess capital; (*b*) Unnecessary facilities.

It is estimated that rates could be reduced at least 40 per cent were these excesses non-existent.

Traders need reduced rates; this can be appreciated from the following table of reductions in prices of food stuffs since 1866–1877 to the present time:—

Article.	Present Prices as compared with Average Prices in 1866–77.	Article.	Present Prices as compared with Average Prices in 1866–77.
Wheat, English	reduced 50 per cent.	Potatoes	reduced 25 per cent.
„ American	„ 44 „	Beef	„ 18 „
Flour	„ 38 „	Bacon	„ 20 „
Barley	„ 34 „	Butter	„ 50 „
Oats	„ 33 „	Sugar	„ 42 „
Maize	„ 37 „	Tea	„ 35 „

Railway rates have been increased during the same period, and the railway companies take more now on the cheaper goods than they did previously on the dearer goods. The United States rates have been reduced 75 per cent, and the Tasmanian 80 per cent, since 1870. Queensland has recently made substantial reductions. New South Wales reduced her rates in 1895. New Zealand is now reducing rates. Argentine is reducing rates "to meet the necessities of trade," and even in Venezuela there are signs of a large reduction. The effect of the rate reductions can be well illustrated from the case of the Iowa Railway Commissioners. These Commissioners issued a schedule in 1889 of reduced rates. The railway companies offered opposition, and began reducing train service and discharging employés. It was, however, very soon necessary for the same railway companies to reinstate the discharged employés to cope with the increase of traffic through the reduced rates. The Iowa railways show the following earnings:—

Year	£	
1886–87	7,500,000	Years of Stationary Rates.
1887–88	7,500,000	
1888–89	7,500,000	
1889–90	8,300,000	Years of Decreased Rates.
1890–91	8,600,000	
1891–92	8,900,000	

Further, in 1888–89 the net earnings of the companies were £2,400,000, and in 1890–91 these were £2,900,000. The gross earnings increased 15 per cent, but the net earnings increased 21 per cent. With our British rates an increase of 6d. per ton gives the railway company 10 per cent more revenue.

With us the railways are (1) Over-capitalised, and this has been going on with the knowledge of the State; (2) Wasteful, unnecessary facilities, which is largely the result of competition for traffic. It is, therefore, essential to recognise these two considerations before putting forward any idea appearing to suggest material reductions in charges. The first cannot now be corrected, but further over-capitalisation can be prevented. The second consideration is an element of private enterprise, and will always exist under the present conditions.

The question, then, of the unnecessary expenses in facilities could be amended by centralisation of the railway business. The secret of low rates in other countries is largely this centralisation. Rival railways to the same town constitute one of the gravest anomalies of our system, but under a more centralised management the business could be so arranged that one line could be used for goods traffic and the other for the increasing passenger traffic. The result would be quicker despatch of goods and a diminution of the possibility of railway accidents, for which, in compensation, the companies pay yearly over £100,000. This arrangement would allow each service to bear its actual expenses, as actual expenses would then be known. The enormous legal expenses—£300,000 yearly—now spent by railways chiefly in fighting each other would be saved. Centralisation would largely dispose of the loss on partly-filled trains and wagons returned empty. The organisers of the railway business would have full information of the density of goods traffic between various points, so that unnecessary trains would be obviated and unnecessary cartage teams could be dispensed with. The centralisation of the management and the economy of labour consequent thereon would make many of the present army of directors, officials, clerks, canvassers, and the staff of the Railway Clearing House unnecessary, but most of these would be sure to find other duties which would quickly arise from the ensuing expansion of traffic. Advertising also would be largely unnecessary. It is estimated that centralisation would save £200,000 per week, which would make possible a reduction of rates of 20 per cent.

The railway companies press for sanction to amalgamate. The principle and advisability of this was fully investigated by the Board of Trade in 1845, at the time of the great railway building, and the Board approved mainly of the proposals. Amalgamation

has already been carried out very largely. Six of our present railways were originally 104 smaller railways. France pressed her railway companies to amalgamate, with the consequence that there are now six great railways. In England there are 114 railway companies.

REMEDY.

It is suggested that on the investigation of a petition to amalgamate, the Board of Trade should insist upon a material reduction of rates and charges as a condition of approving the amalgamation. As there would be considerable prospects of increased gains, the companies would willingly make such reduction. A reduction of 5 per cent on each amalgamation would soon be of very material benefit to the trader. For example, a reduction of 5 per cent on the amalgamation of the London, Chatham, and Dover and the South-Eastern Companies, and a further reduction of 5 per cent when the above companies and the London, Brighton, and South Coast Railway Company combine (which is very probable), would have a substantial effect. An amalgamation of the London and North-Western Company and the Lancashire and Yorkshire Company, whose lines are now so much intermingled, would probably follow, and the Board of Trade's terms of reduced rates for approval of amalgamation scheme would be accepted. The traders need immediate relief, and only those reforms that lie nearest to hand and are easiest may be urged. The reform of allowing the railway companies to seek their own advantage in amalgamation and compelling them to share that advantage with the public in reduced charges is of a simple and practical kind, and would lead to an ultimate solution of the railway problem. There is a decided tendency to amalgamate, and it is only a continuance of the policy railways have pursued in the past and in all countries. The London and North-Western Railway Company and the Midland Railway Company are the results of the combination of many companies. These same two companies petitioned Parliament to sanction their amalgamation and were refused. Parliament, led by Mr. Gladstone, feared the railway monopoly. They seemed to see the remedy for high charges in competition, but they did not see that in the place of competition there would be perfect agreement. There is now agreement where we want competition, viz., in charges—and competition where we should have agreement and co-ordination, viz., in the actual means of transit. We cannot disestablish such agreement, but we may modify it considerably as the price of granting amalgamation. Mr. Gladstone and his colleagues feared that the wealth of a great railway combination would seriously influence the Government. We find, however, that the Railway Commissioners have been strict judges, generally

consulting the public interest, and that the Board of Trade, in spite of some stated weaknesses, has often presented a bold front to the forces that endeavoured to sway it. With a still more powerful Board of Trade, supported by the organised action of the traders, we need not fear even the inclusion of the whole of the railways of Britain under one gigantic trust. Rather should we welcome such action, for it is apparent to the most individualistic that the means of transit of a whole country cannot be subject to the interests of one single body. We should see everyone, including even the shareholders, urging the transfer to the Government, which would create State bonds in place of the share scrip, and against the seeming debt so created we should hold the valuable asset of the railways of the country—one of the most important factors in our competition for the world's markets.

CONCLUSION.

It has been shown how rates have evolved from the road toll to the present conveyance rate, with the attendant station and service terminal charges; how the trader, through the Board of Trade, has imposed restriction and reform on the railways, so that the wishes of the Government Department are as much respected as the commands of joint Boards of Directors. A comparison has been made with foreign and colonial countries. It has been shown that the greater the tonnage per mile per year the cheaper proportionately it is to work railways, and that Britain, which has the greatest density of traffic, has twelve other countries, her competitors, carrying goods cheaper per ton per mile. Further, compared with other countries, British railways have cost many thousands of pounds more per mile, much of which has often been merely wasted. The causes of the vexatious grievances of the traders in the matters of "smalls" and parcels have been tabulated; cartage rebates and terminals have been treated upon. A significant point is made manifest—that while foreign and colonial rates have generally decreased ours have increased.

To point out some immediate practical reform has been difficult, especially so when the power to reform has passed, as in the great over-capitalisation of our lines. But there is little doubt that the fact of prime importance that this inquiry has brought out has been the evil of competition for traffic. A remedy is proposed to cease the present useless opposition to the natural tendency of companies to amalgamate, and to use this desire as a lever to obtain cheaper transit. Such amalgamation would most probably end in a complete railway monopoly by one body (strictly under the control of the Board of Trade), quietly passing one day into the Transit Department of the Government of Great Britain.

APPENDIX.

FRANCE.—The first railway in France was opened in 1841, from Paris to Rouen. The early railways had no fixed classification, each company acting independently, and they classified articles differently. The Paris-Lyons-Mediterranean Railway had three classes, the Eastern Railway Company of France 28. Now the classification is the same all over France, and contains six classes. The system is *pro rata*, and charges vary accordingly; the rate for fast traffic is often three times that of ordinary traffic. They have two speeds—*grande vitesse* (fast) and *petite vitesse* (ordinary). The French railway companies allow 94 miles as a day's journey, and it is stated that the companies purposely lengthen the time of transit to force some of the traffic into the *grande vitesse*. A charge of 8d. per consignment is made for registration fee and receipt stamp. Upon small lots, loading and unloading combined is 7¼d. per ton, and station expenses each end are 3½d. per ton. For ordinary goods traffic, collection and delivery charges vary per ton with the weight of goods, and in Paris the charges are from 2s. 4d. to 5s. 6d. per ton. Cartage at places such as Estrees and Villeret is 15s. 10d. per ton, but these places are situated some distance from the railway. The railway rates were increased between 1872–81; the State, however, who control about 8 per cent of the lines, are usually 8 per cent to 10 per cent under companies' rates. The published rates are not much adhered to, some 80 per cent of the traffic being carried at special rates. Every rate has to be approved by the Minister of Public Works before it can be charged; even a reduction must be approved by him. The grouping of towns for one rate is permitted.

GERMANY.—It was originally intended that the railways should simply own the road bed, the traders to run locomotives and trucks; but, as in our own country, this was soon altered. In 1870 the "Natural System" of rates was put into operation, viz., charges independent of the nature of the goods and of any goods classification. Charges varied only according to the speed, weight, and type of wagon employed. This ceased in 1877, and the Germans now work on the "Reform System," which is an equal rate per ton per mile, *plus* terminal charges with only a very slight classification. At the outset, however, of this system, it was found that the terminals, if charged in full, killed the short distance traffic. The terminals were then adjusted to meet short distances, and the loss in revenue was balanced by an increased mileage charge. In this way the short distance is relieved. But this brought about the difficulty that often the mileage rate was so heavy that goods could

not bear the charge to the frontier, and so a special schedule of export rates was introduced. Other special rates were also made, and at present 50 per cent of the German traffic is carried at these special rates.

The classification is divided as follows:—(1) express, (2) parcels, (3) half wagon loads, (4) wagon loads, (5) grain, &c., in wagon loads, (6, 7, 8) special wagon loads.

The system of classification is based on the wagon load to a greater extent than upon the nature of the goods. Station terminals vary from 10d. to 2s. per ton. Loading and unloading is additional on the wagon load rates, and costs 4½d. per ton for each service. The railways are not common carriers. The nature of the system leaves the transit of goods very much open to carriers, who engage a wagon, at wagon rates, and load it with small consignments of goods, charging each trader a little less than the railway parcels rate. Thirty per cent of the traffic is manipulated in this way by carriers. This is known as the "grouping system." The carriers are now forming syndicates for the promotion of this system. There are 92 per cent of the lines in the possession of the Government, but facilities provided at the goods station are poor, and the time allowed for an ordinary journey is five days.

A point worth noting about the German railways is the Consultative Councils which exist to consider all questions of traffic. These Councils are local, and are composed of representatives of the Government and of the traders. The grouping of towns for coal is allowed. Special export rates are encouraged, but special import rates were abolished by Bismarck in 1879. On coal the railways allow the consignees a trade rebate to encourage the traffic.

Belgium.—The greater portion of the railways and canals of Belgium are controlled by the State. Up to 1853 Belgium had only the crudest form of *pro rata* tariff with very slight classification. The year 1856 marks a period of Railway Wars, and we find the Government actually granting special rail rates to prevent the traders using the Government canals. Owing to this, the rates were at this time very low, but still the railways were working at a fair profit. Belgium has now adopted the sliding scale principle, which makes the medium distance pay more in proportion than the long or the short distance. The railways have three speeds—*petite vitesse* (ordinary), *accélérée* (medium), and *grande vitesse* (fast). Practically, no goods classification exists except for full wagon loads. Goods less than wagon loads are charged without reference to nature or value. In the classification for wagon loads about 800 articles are included, framed upon the

basis of the value, mode of transit, and railway responsibility, and whether carried in open or closed trucks. The classification is: (1) articles by passenger train, (2) chiefly articles up to 4cwt. sent by goods train, (3) chiefly articles up to 8cwt. and over sent by goods train, (4 and 5) goods specified in 5-ton lots, (6) goods specified in 10-ton lots. The charges for service terminals of loading and unloading are about 5d. per ton for each service, and the use of cranes is an extra charge, viz., 3d. per ton. Station terminals are included in the conveyance rates. The railways are under carriers' law, and further are responsible for delays. The cost of collection in Brussels averages 2s. 5d. per ton and delivery 4s. per ton. Traders have to pay 2d. per consignment for registration and 1d. per consignment for the advice of arrival. Supervision of consignors' loading (if wagon loads) is 3d. per ton. Goods to private sidings bear an additional charge of 5d. per ton.

Sweden.—Goods are divided into twelve classes, besides special classes. Rates are fixed to give an advantage to long distance traffic. The Government railways' charges are somewhat different from those of the private companies, but really differ little from them. Each private company has its own schedule of charges. There are two goods services—express and ordinary. The express charges are from 66 per cent to 100 per cent over the highest charges at the ordinary rate. Small lots are not charged on a special scale, the Swedes charging as low as 3d. (excepting, of course, with wagon loads). Loading and unloading is charged 3½d. per ton each service. Goods are neither carted nor delivered by the railway. The railways seem to have no special charge known as station terminals; such must be covered in the conveyance rate. Special rates are sanctioned, but there are no special import or export rates. The canals offer no serious competition with the railways. They are principally owned privately, and are only open about six months in the year. The railways have bought up no canals. The freights by sea are about 26 per cent under rail rates between corresponding places. All rates have to be submitted to the Government for sanction.

Holland.—Holland owns 55 per cent of her railways, and the system approximates closely to the German. Goods are divided into six classes, viz., two classes for consignments for less than a truck load, and four classes for wagon loads. This is practically the same on all lines. The system is nominally an "equal mileage," but this is not carried out, allowances are made in many directions. Owing to the nature of wagon load business carriers have a large share in the traffic of the country, taking a wagon at wagon rate and collecting consignments of

goods from traders, the railway merely receiving the toll for mileage, &c. The railways have maximum rates fixed, and the State has authority to fix these maxima, but in practice the maximum is seldom charged. Any alteration in a rate has to be notified to the Home Minister for approval. By enactment the special rates made are chargeable over the whole railway for a similar distance. Export rates are invariably lower than the ordinary inland rates, and special rates are offered for goods in transit through Holland. Terminals vary from 1s. 2d. to 2s. 6d. per ton for station and service, excepting that weighing, counting, labelling, advice, &c., are not included; for these a small additional charge is made. There are different speeds, as in other countries on the Continent. Goods by fast trains *(grande vitesse)* are charged double the rate of ordinary traffic *(petite vitesse)*.

Denmark.—Denmark owns nearly 75 per cent of her railways, and has three different speeds for goods, viz., express, fast, and ordinary. The goods at express rates pay 50 per cent more than the fast rate, and the fast rate averages nearly $2\frac{1}{2}$ times the ordinary rate. There is really no classification for goods of less than wagon loads, except that some goods can be sent at "reduced ordinary rates." The wagon loads are divided into four classes; the railways take risks; they do not, as a rule, collect or deliver. The Government has a fleet of steamers in connection with the railways. Terminals are not shown as a separate item.

Austria.—Austria now owns over 50 per cent of the lines within her borders. In 1838 a railway law was enacted providing, among other things, for publicity of rates and for their reduction under certain conditions. Austria has adopted the sliding scale system similar to Belgium, the rates being relatively heavier for middle distance traffic. The railways have different speeds, and the charge for quick service is often three times that of ordinary traffic. There are only two classes for goods less than a wagon load, and five classes for goods in wagon loads. Each railway has a special export tariff, and traders benefit often as much as 15 per cent. The Austrians also offer special transit rates for goods for shipment at the Dutch ports. Special import rates are not favoured, and imported goods are usually carried at ordinary rates. Special low rates are charged in connection with goods carried partly by rail and partly by the Danube. Austria has established advisory boards, and representatives of the railways and traders discuss traffic matters. The Government railways and private railways enter into "pooling" arrangements to prevent competition in rates. Terminals are separate charges, and approximate to the British.

United States.—The first railway was opened in 1827 at Quincey. The United States has probably had more trouble with its railways than any other country, owing, generally, to the weakness and corruption of State control. The railway companies play no small part in prominent matters outside their own peculiar functions. Rate wars have caused serious disasters to the railways themselves, and it is very uncertain whether the traders have reaped any benefit in consequence. Practically all rates are based upon the rates operating between Chicago and New York, and generally include all services except collection and delivery. Terminals are not separated. "Equal mileage" is the law of the American Legislature, but this law is not enforced. The Railway Commissioners fix the maximum rates for the local traffic of each State, leaving the companies to fix the actual rates, provided the maximum rate be not exceeded. Inter-State rates are fixed by the railway companies, under the supervision of the Inter-State Commerce Commission. Each railway company has its own classification, but generally such is modelled on what is known as the "Eastern" classification; this divides goods into five classes. The classification provides for large wagon loads, otherwise it is much on the English principle. About thirty States have Railway Commissions, but half of these have advisory powers only. The American railway companies encourage long distance traffic and wholesale loads. Long distance rates are extremely low, but short distance rates are relatively high. Goods in small lots are often held back until there is a remunerative load. A considerable portion of the traffic is carried at owners' risk. The express companies, which carry a large share of all classes of traffic, correspond to our passenger service. These companies often furnish their own wagons, and always send their own servants. They load, unload, collect, deliver, and, in some cases, provide the station accommodation. They are not, however, controlled by law, and need not publish charges. The charges by these companies are often exorbitant and out of comparison with the charges of the railway companies, sometimes reaching to 15 per cent of the value of the goods. The waterways in competition with the railways show a somewhat mixed result. Many canal and shipping companies have their rates actually fixed and their traffic pooled by sundry outside bodies. In some instances railway companies have bought up canals, and in Pennsylvania the railway companies have followed this up by closing a large number of canals. Nevertheless some waterways compete keenly with the railways for traffic. The canals only carry one-sixteenth of the traffic, and the tendency is for this to decrease. Special export and import rates are legal and are very low. Goods from

San Francisco to the Atlantic seaboard are carried at remarkably low rates. New York terminals are 2s. 6d. per ton. Goods can remain on some New York piers sixty days free of charge, and usually twenty days' storage is allowed. The cost of working goods traffic has been reduced 50 per cent during recent years. Grouping of towns for one rate is allowed. Conferences between railway and shipping companies are forbidden by law.

Canada.—Canada opened her first railway in 1836, from La Prairie to St. John's. Canada has two sets of charges for rail—one for winter, and one for summer—and possesses one of the largest railways in the world. The classification is similar to that of the United States, with special advantages for wagon loads. Cartage costs 1s. 2d. to 2s. 4d. per ton. The rates for carriage are fixed very low, and favour long distance traffic. The canal competition with the railways is very ineffective. At present the Government only owns 7 per cent of the railways. Terminals are not separated.

New South Wales.—New South Wales opened her first railway in 1855. Rates have been materially reduced since 1879, in some instances more than 50 per cent. The up-country traffic to Sydney has preferential rates with a view to developing certain districts, and special rates are in force at Broken Hill and various points on the River Murray to counteract the competition of the Victorian and South Australian railways. In times of drought "starving stock" rates are put in force, which are 50 per cent under normal rates. These enable cattle to be sent to districts where food and water is obtainable. The facilities for water carriage offered by the Darling River affect the rail rates to a large extent. It is noteworthy that 97 per cent of the lines are in the hands of the Government. Loading and unloading costs 1s. per ton for each service. Station terminals are not separated. The goods are divided into four ordinary classes besides special classes, and the rates are made with a view to benefiting long distance traffic.

South Australia.—South Australia divides goods into six classes. There are special rates in force. The rates are fixed with a view to encouraging long distance traffic. Ninety-nine per cent of the lines are owned and worked by the Government. Terminals are not separated from the through rate.

Western Australia.—Western Australia has seven classes for goods, and rates materially favour long distance traffic. Terminals are not separated. The Western Australian Government owns and works 70 per cent of the lines.

New Zealand.—New Zealand, owning 93 per cent of its lines, is largely developed on special local rates. Considerable reductions have recently been made, and the railways are now carrying lime free of charge. Goods are divided into seven classes, and rates are fixed to encourage long distance business. Loading and unloading is done by traders or agents, and costs 6d. per ton for each service. Station terminals are not separated from the conveyance rate.

Cape Colony.—Cape Colony has about thirty classes for goods, and some special classes. The rates are fixed with the purpose of benefiting short distance and long distance traffic at the expense of the middle distance, in this respect resembling somewhat the Belgian and Austrian Railways. There are special rates for local products. Cartage usually costs 1s. 8d. per ton; loading and unloading, 4½d. per ton each service. Station terminals are not separated. Over 93 per cent of the lines are now owned by the Government.

Natal.—Goods traffic is divided into six classes, the class for Natal produce being worthy of note, as it is carried at low rates. The rates are fixed to benefit long distance traffic. The Government owns all the lines. Terminals are not separated.

Bechuanaland.—Bechuanaland has equal mileage rates. Goods are divided into four ordinary and three special classes.

Transvaal.—This country's railways specially cater for its own products. There is also a special class for potatoes, grain, &c., but no further classification. The rates substantially benefit long distance traffic. Terminal charges, as we know them, do not appear to be separated from the conveyance rate.

Orange Free State.—Orange Free State resembles Cape Colony in owning all her railways. Goods are divided into thirty-one classes, but there is little system in the rates. Charge for cartage in Bethulie is 2s. 9d. per ton.

Note.—The writer wishes to acknowledge his obligation to the following authors on railway matters:—Mr. Hadley, Mr. Acworth, M.A., the Inter-State Commerce Commission of the U.S.A., Mr. Edward Clements, Mr. Perris, F.S.S., and Mr. Grierson. A copy of the Confirmation Acts, showing the actual maximum rates and terminals allowed to be charged by the railway companies, can be obtained from Messrs. Eyre and Spottiswoode, East Harding Street, Fleet Street, London, E.C.; Messrs. John Menzies and Co., 12, Hanover Square, Edinburgh, and 90, West Nile Street, Glasgow; Messrs. Hodges, Figgis, and Co., 104, Grafton Street, Dublin. Price 1s.

Sugar, Commercially and Botanically Considered.

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(*Illustrated by John Allen.*)

THE interest that has for several years past centred round the sugar industry in the West Indies, the question of bounties and countervailing duties, and the attempts to restore the position of the islands by the introduction of other cultures than that of its old staple, sugar, is a matter of so much importance to the whole English nation, collectively and individually, as to form a sufficient reason for taking up the subject of the sugar supply for consideration in the Co-operative Wholesale Societies' "Annual."

Of all commercial products sugar is perhaps the one that affects a larger portion of the human race than any other, because, taking the word in its widest sense, sugar is found more or less in all plants, and it is known in all countries, civilised and uncivilised. Cane and beet are, however, the two most important sugar-yielding plants, and to these we have first to draw especial attention.

Regarding the early history of the sugar cane, *Saccharum officinarum*, it is considered by some authorities to be identical with the "sweet cane" of Isaiah and Jeremiah, and if so its properties were known to the ancient Jews. There is no doubt but that it was known in India and China at a very remote period, and botanical evidence points to it as having its original home in India, which is supported by the fact that several wild species of *Saccharum* are found on that continent. The sugar cane was first made known to the western parts of the world through the conquests of Alexander the Great, and it seems to be clear that it was cultivated on the shores of the Persian Gulf in the ninth century. It is said by Albertus Agnensis, about 1108, that "the Crusaders found sweet-honeyed reeds in great quantity in the meadows about Tripoli, which reeds were called *Sucree*." These reeds were sucked by the Crusaders' army, who found much nourishment in them. The same writer says: "This plant is cultivated with great labour of the husbandmen every year. At the time of harvest they bruise it when ripe in mortars and set by

the juice in vessels till it is congealed in the form of snow, or of white salt. This, when scraped, they mix with bread, or occasionally with water and take it as a pottage." Watt says that the cultivation of sugar cane and the manufacture of sugar was carried by the Spaniards into the Canary Islands in the fifteenth century, and that in 1420 the Portuguese had conveyed it from Sicily to Madeira and to St. Thomas's Island. In 1506 it was taken from the Canary Islands to San Domingo. The Dutch first established sugar works in Brazil in 1580, but on being expelled from that country by the Portuguese they carried the art of sugar manufacture in 1655 to the West Indies. Sugar was manufactured by the English in Barbados in 1643, and in Jamaica in 1664. A spirited competition soon took place between the British, French, and Portuguese manufacturers. The British, by greatly improving and cheapening the manufacture, were able to undersell the Portuguese in Brazil. The trade was at that time free, but on the restoration of Charles II. importation into Great Britain was by various Acts restricted to British subjects. By 1726 the French had so vastly improved their manufacture in San Domingo that they began to compete with the British in the supply of Europe, and a serious decline in the British imports from the West Indies accordingly took place. It will be seen from this that the production of sugar had spread from India to Europe, but more especially to the West Indies. Civil disturbances in San Domingo at the close of the eighteenth century ruined the French planters, and a greatly increased demand arose in British West Indian sugar, with a corresponding rise in price. Raw West Indian sugar of the worst description realised in Britain at that time 9d. per pound, and a public memorial was presented to the East India Company asking them to bring Indian sugar to England in competition with West Indian. with the view of lowering the price. Every encouragement was given to its importation into Britain, and the vigorous efforts then made to establish East Indian sugar in the home market increased the cultivation of the sugar cane in India to a very large extent.

In 1792 the English Government, with the object of guarding against a further rise in price, imposed restrictions on exportation, but this state of affairs did not last long. Apparently the exports from India had some time previously began to tell powerfully, and an increased production in the West Indies had also been brought about. Accordingly, in 1807, a Committee of the House of Commons had to be appointed to consider the depressed state of the West Indian trade. It was shown that an alarming fall in the price of sugar had actually taken place (since 1799), and it was anticipated that unless some efficient remedy was early thought of

ruin to the West Indian planters would rapidly supervene. Various measures were considered, but none apparently put in force. The sugar trade and the West Indian interest were left to shift for themselves and be adjusted by material causes. Among the suggestions offered by the Committee it was proposed to increase the consumption of sugar by introducing its use into distilleries. The imposition of a heavy duty on the Indian sugar had not the desired effect. Indian sugar had to pay an import duty in 1792 of £37. 16s. 3d. per cent, while West Indian sugar paid only 15s. 5d. per cwt. Far from contemplating the removal of the entire duty on West Indian sugar, however, the Committee deplored its threatened loss, though they heartily sympathised with the West Indian planters in the ruin which then seemed about to overtake them. The Committee thus recommended no practicable cure for the distressing problem they were convened to solve. The duty on West Indian sugar amounted in 1807 to £3,000,000, and the return export trade was valued at £6,000,000. The Committee could not, they seemed to think, recommend the sacrifice of so important an item of the English revenue. Popular feeling was strong in England against sugar manufactured by slaves. Preference was given to the inferior article from India because it was made by free men. The position was a critical one, but greater dangers were foreseen than those connected with sugar.

We have gone thus far rather fully into the history of the sugar cane as affecting the industries of both the East and West Indies because in some respects it is an illustration of history repeating itself, and because it has a bearing upon present difficulties, and this is further borne out by Dr. Watt's reference to the discovery of sugar in the beet, a discovery, he says, that was destined to paralyse the sugar cane trade of the world. As indicating its influence on the sugar production of the East Indies we must quote Dr. Watt as the best authority on such a subject. He says:—

> The influences of this new manufacture have been all powerful and widespread, bringing ruin or expensive reforms into the utmost corners of the sugar-producing area. India has, perhaps, felt the effects of this revolution fully as much as any other sugar cane producing country. It would be impossible, or nearly so, to expect the time-honoured systems of production and manufacture of crude sugar (the article which in India or when exported is refined into superior sugars) to change in obedience to foreign necessities. The apparatus necessary for direct manufacture is beyond the means of the ordinary Indian sugar producer. It was, therefore, only what might have been anticipated that, instead of attempting to compete, the industry of refining or of preparing the article required by the foreign refiners should have declined and the demand for crystallised sugars been allowed to be more and more supplied by imported sugars. Many of the modern methods discovered in connection with the development of the beet sugar trade, or which have been brought out in the keen competition which has arisen between cane and beet sugars, have been

taken up by the wealthy sugar planters of the Colonies, and hence these cane sugar producers have, in some respects, felt the struggle that has taken place less severely than has been experienced in India. Still, sugar cultivation has by no means declined. The trade has been almost revolutionised, but the price and supply of the crude substance used by the people of India is more satisfactory than ever it has been. The Indian people do now and always have preferred a crude raw sugar, or even molasses, to a refined or crystallised article, and the sugar they thus use can be produced at a price which not even beet has as yet been able to approach. It will thus be seen that it by no means follows that because the foreign exports of India have for some years past shown a serious decline that sugar production is ruined, nor that people are eating less sugar. On the contrary, it seems probable that the beet sugar trade and direct cane sugar manufacture have lowered the value of the article formerly prepared for the refiner, and thus cheapened the crude sugar used by the people.

Having briefly sketched the condition of the cane sugar trade in India, it will be well to consider the position of the same culture in the West Indies, to which so much attention has been directed of late years. The letter addressed by the Colonial Office to the Treasury, under date of November 9th, 1896, placed the matter before "My Lords" in a very clear light, as the following extracts will show:—

The price of sugar in open markets has, for some time past, been affected by extraordinary depression, caused both directly by the bounties given by some European Governments and indirectly by the effect of those bounties in stimulating an enormous production in advance of effective demand.

Early in the year 1895 it was judged necessary by the Marquis of Ripon to sanction special remissions of taxation on sugar estates in British Guiana, Trinidad, and the Leeward Islands, in consequence of the evidence laid before him of the critical position of this industry. In the course of that year very urgent petitions and memorials were addressed to the Secretary of State from practically all the Colonies affected, through their Chambers of Commerce and other Associations, making positive statements as to the disastrous effects of the sugar trade in the abandonment of estates and the disorganisation of industry. These representations were endorsed and supported by the Governors. In November, 1895, Mr. Chamberlain was addressed by a very large and representative deputation on behalf of the West India sugar industry and the commercial and engineering interests associated with it, who desired that he should recommend Her Majesty's Government to take active steps against the foreign sugar bounties as the only means of saving the West Indian Colonies from ruin.

In August, 1896, the amounts of the bounties offered by the Governments of Germany and Austria-Hungary were approximately doubled, and a Bill was prepared in France to raise the bounties correspondingly, although it was computed that they were then equivalent to a grant of £3. 5s. per ton. The new German rates were then from 1s. 3d. to 1s. 9d. per cwt., or 25s. to 35s. per ton. The announcement of these increased rates caused a renewed fall of about £3 per ton in the market price of sugar, and resulted in fresh memorials to the Colonial Secretary, as well as a strong and increased tendency to abandon the cultivation of estates. For a time it was thought not impossible that the Continental bounties

might be spontaneously withdrawn, or that the over-production which they caused might remedy itself in the natural manner by the collapse of unprofitable businesses, but the increase in the bounties did not seem to indicate an early remedy in this direction. The result of this was that at the end of 1896 a Commission of Inquiry was appointed to proceed to the West Indies in January, 1897, visiting the several islands and holding inquiries into the condition of the sugar industry as affecting those islands, and the probability of the introduction of other cultures to take its place. It is not within the scope of this article to consider the establishment of other useful plants as a substitute for the decaying sugar culture, but a few facts relating to the condition and the possible future of sugar in the individual islands may well be gathered from the very elaborate Appendix to the Report of the Commissioner which was drawn up by Dr. Morris, C.M.G., who accompanied the Commission as "Expert Adviser in Botanical and Agricultural Questions." Taking the Colonies in the order in which they are treated in the Report, the first for consideration is—

British Guiana, the area of which is given as 65,836,000 acres, out of which 66,908 acres are devoted to sugar cane, which gives employment to 90,492 persons, or about one-third of the total population of the colony. The export of sugar in 1895–96 was 101,160 tons, of the value of £1,046,160. It is the staple product of the colony.

Barbados.—This island is described as being rather larger than the Isle of Wight, and contains 106,470 acres. For the last 200 years the sugar cane has been extensively cultivated here, the present area under cultivation being 74,000 acres. The number of the population employed in the sugar industry in 1891 was 47,045, or 25·8 of the entire population. The average annual export of sugar from Barbados amounts to about 50,000 tons. The value of sugar, rum, and molasses, all products of the same plant, amounted in 1890 to £1,040,720, which in 1896 had fallen to £577,367. These products are the principal items of export, so that Barbados is wholly dependent on the cultivation of the sugar cane.

Trinidad.—This island contains 1,120,000 acres, and the total area under sugar cultivation is given as 66,484 acres. The total production of sugar in 1896 was 59,678 tons, and the value of exported sugar in the same year is given as £700,347. Sugar is stated to be the dominant industry, and to give employment to about 14,000 persons.

Tobago.—The total area of the island is 73,313 acres. The estimated area under sugar is 2,000 acres. The value of sugar produced in 1896 is given at only £5,109. "Formerly the bulk of Tobago sugar was shipped to the United Kingdom. At present

none of it is sent thither, as, according to the evidence, 'Tobago sugar is practically excluded from the British market.' "

GRENADA.—Connected with this island are certain outlying islands called the Grenadines. The estimated area of the whole is about 85,015 acres. The area now under sugar is calculated at about 1,000 acres, and at the present time the island does not produce sufficient sugar for its own consumption.

ST. LUCIA is the largest island of the Windward group, and has an area of 233 square miles. The area occupied by sugar cane is 2,086 acres. The total value of the collective sugar products, including rum and molasses, in 1896 was £63,000, against £99,000 in 1892.

ST. VINCENT.—The total area of this island and the St. Vincent Grenadines is 93,987 acres. The sugar industry in St. Vincent has been in a gradually decaying position for the last fifteen years. The total value of the produce, under the system at present in vogue, is estimated at £20,400.

DOMINICA.—The total area of this island is given as 186,240 acres. The products of the sugar cane form at present only a small share of the total exports of the island, and the aggregate area under cane culture is given at 975 acres. The value of the collective exports of sugar, rum, and molasses has fallen from £17,571 in 1890 to £7,554 in 1896.

MONTSERRAT.—The area of this island is 25,000 acres, and the area under sugar culture is estimated at 6,000 acres. The value of collective exports of sugar and molasses—no rum being produced —in 1896 was £14,967, against £22,745 in 1892. It is stated that the sugar industry is "in imminent danger of extinction, as prices at present are below the cost of production."

ANTIGUA.—The area of this island, which is the seat of the Federal Government of the Leeward Islands, is given at 108 square miles. Sugar and molasses are practically the only products of the soil exported from Antigua. The total area of cane cultivation in the island is given at 15,603 acres. The sugar produced is almost entirely raw or muscovado sugar.

ST. KITTS-NEVIS.—The three islands of St. Christopher, Nevis, and Anguilla, lying west of Antigua, form a group of the Leeward Islands. The area of St. Kitts is 42,000 acres. The area under sugar cultivation in St. Kitts-Nevis is 22,253 acres. The collective value of sugar, rum, and molasses exported from St. Kitts-Nevis in 1896 amounted to £105,245, against £252,643 in 1893.

JAMAICA.—This well-known island has an area of 2,692,480 acres. The area under the cultivation of sugar is 30,036 acres. The export of sugar in 1895–6 was 21,930 tons, and the collective value of exports of sugar, rum, and molasses is returned at £360,059, against £426,688 in the previous year. As a means of remedying

the financial losses to the West Indies owing to the competition of bounty-fed beet sugar a scheme was drawn up by the Commission for the "Establishment of a Department of Economic Botany and for Agricultural Instruction in the West Indies," which was forthwith established and a grant made by the Imperial Government for carrying out the suggestions contained in the scheme, which consisted of improvements in the cultivation of the cane either by devoting especial attention to the raising of new varieties and improving their saccharine contents, or by introducing other plants of economic value. It is too early yet to know what the result of this great undertaking may be, but that confidence is still felt in the future of our West Indian possessions, and particularly in the future of their sugar supplies, seems to be apparent from public utterances which are frequently appearing in the daily press.

The subject of the formation of sugar in plants is one of too technical a nature and too extensive to enter upon in this article in anything like detail. It has an intimate connection with the subject of selection or improvement of varieties as affecting their yield. The following extract from the *Kew Bulletin* for February, 1891, gives in plain language the difference between glucose and cane sugar: "While the former is a migratory product destined to afford material for the building up of tissues, the latter, as Sachs correctly points out, is a 'reserve material' stored up for some future effort of growth on a large scale, such as the process of flowering, yet it is singular that it is twice as soluble as glucose. Nevertheless, glucose seems to be what may be called the sugar 'currency' of the plant economy and cane sugar only the 'bullion' or banking reserve. The botanist is quite clear as to what happens in a cane sugar plant." This is Sach's account: "Starch is assimilated in the leaves of the beet; in the petioles it is found again in the form of glucose. This glucose now enters the growing and swelling root and is transformed into cane sugar in its parenchymas." On the subject of microscopic structure we quote the following from Fluckiger and Hanbury's *Pharmacographia*:—

> No crystals are formed in the parenchyme of the cane, the sugar existing as an agneous solution chiefly within the cells of the centre of the stem. The transverse section of the cane exhibits numerous fibro-vascular bundles, scattered through the tissue, as in other monocotyledonous stems, yet these bundles are most abundant towards the exterior, where they form a dense ring covered with a thin epidermis, which is very hard by reason of the silica which is deposited in it. In the centre of the stem the vascular bundles are few in number; the parenchyme is far more abundant, and contains in its thin-walled cells an almost clear solution of sugar, with a few small starch granules and a little soluble albuminous matter. This last is met with in larger quantity in the cambial portion of the vascular bundles. Pectic principles are combined with the walls of the medullary cells, which, however, do not swell much in water.

The propagation of the sugar cane has always been effected exclusively by means of cuttings from the stems. The plants under cultivation have so rarely produced mature seeds that it has been impossible to raise plants in this way, and it was thought that the cultivated cane had lost its power of ripening seeds; as, however, it was seen to be very desirable in the interest of the sugar cane culture to raise new or improved varieties in this way, experiments have for some years been made in the sugar producing Colonies, especially in Barbados, from which it has been shown to be possible so to raise plants. In consequence of this it has been suggested that by perseverance in this direction it may be possible to effect as much improvement in the cane, as affecting its yield in sugar, as has been done in the beet, though, perhaps, not with the same rapidity. Similar results, however, may be obtained by a method of chemical selection, a practice which has been successful in Louisiana, and from experiments made in Barbados in 1895, and reported upon in 1897 by Mr. J. R. Bovell, as follows:—

In December, 1895, a plot was planted with cuttings of the upper halves of canes that contained over the average amount of available sugar in the canes tested the first day; a second plot was planted with cuttings of the upper halves of those below the first day's average, and a third plot was at the same time planted in the usual way, *i.e.*, with cuttings taken indiscriminately from ordinarily well-grown canes. These plots were tested, and the results were very satisfactory. The canes grown from the cuttings taken from the richest canes gave the richest juice, those from canes lowest in sucrose the poorest juice, and those planted in the usual way coming about midway between the other two.

In ordinary sugar planting the healthiest and most vigorous canes are selected for making the cuttings. Every part of the cane stem with a perfect "eye" or bud will put forth a new plant; preference, however, is usually given to the "cane top," which consists of the upper joints nearest the leaves. At these joints, or nodes, the "eye" or bud at the time it springs forth produces a number of roots, from which the young growing plant draws its sustenance till it is sufficiently advanced to put forth roots of its own. As it continues to grow the original or parent cutting gradually decays and falls away, and the young plant begins to form eyes or buds of its own. In Bengal a peculiar method is practised with the cuttings, which consists of burying them in a pit until they sprout, when they are removed and planted out in the plantations. In placing them in the pit great care is taken to arrange them in regular layers, with wet straw and mould between each layer. Care is also necessary in removing them from the pits, lest the young blanched and tender shoots should get broken. Cuttings prepared in this way can be kept for some time until the fields are ready for planting, and when transferred to hot, moist ground they thrive well, but in dry or cold situations this system of starting the cuttings is not suited.

On the subject of "ratooning" it may be as well to say that the first crop of newly-planted cuttings is called "plant" canes, which, when cut and carried, leave the stole, or stool, remaining in the ground. These in due course send up another growth of canes, which are termed ratoons; the first and succeeding crops of these are known as first and second ratoons, and so on. These ratoons diminish yearly both in length and circumference, the roots produced from the buds being fewer than in the original plant, and, being nearer to the surface of the earth, supply less nourishment to the ratoons. Consequently they are for the most part less vigorous in their growth. On some soils it is a practice to plant a certain proportion of the land in annual succession. The stools are left in the ground, and as they become thin and impoverished the vacant spaces are filled up with fresh plants. It is necessary, however, under this system to assist the bad growth by loosening the earth around the stools and keeping it clear of weeds, besides which, after rain, the stools should be manured and the ground covered with cane trash to prevent its drying. At the expiration of three or four months the canes should be well dressed, after which, until the period of cutting, they will require but little care.

In Locke and Newland's "Handbook on Sugar" it is stated that by the method of constant ratooning the produce of sugar per acre, if not apparently equal to that from plant canes in newer soils, yields perhaps in the long run quite as much profit to the grower if the relative proportion of the labour and expense attending the two methods be taken into consideration. The very small average produce of sugar per acre in Jamaica is due to the system of permanent ratooning there prevailing, the plants that fail being replaced yearly one by one. The expenses are thus very small, and the risk of losing a field of young plants by drought is avoided; but the yearly crop is necessarily much curtailed, and a rotation of crops is rendered impossible.

A few words may here be said on the subject of harvesting. When the canes are ripe they are cut off as near to the stool as possible, a hatchet being used for this purpose. Fresh vigour is thus thrown into the ratoons that will spring from the old root, and, at the same time, the juice from the lower joints of the stem is the richest of any contained in the cane. The top of the cane is cut off and discarded, sometimes at the first, at other times at the second, joint, as the quality of the juice in these younger or less-matured joints will often injure the quality of the sugar. All the leaves are, of course, stripped off; damaged and diseased canes are also separated from the healthy ones. After thus sorting, the canes are tied in bundles and carried to the mill, where the operations of extracting the juice and its subsequent manufacture

into concrete sugar are effected. The best known system of liberating the juice from the cells of the cane is that of crushing it in roller mills, and collecting the fluid thus squeezed out. The earliest method of sugar extraction was a very rude and primitive form of roller mill, some idea of which may be gained from the drawing of the manufacture of sugar at Katipo. (See Plate 6, Fig. 1.) It is impossible within the space of this article to do more than simply refer to the elaborate machinery now employed in sugar mills—machinery which has become a special study of engineers to perfect. With regard to the system of maceration, its object and results have been briefly described as follows:—

It has been sought to facilitate the extraction of the juice from the cane by submitting the cane to the action of water or steam, either before the crushing operation in the roller mill or at an intermediate stage between two such crushings. It seems to be an undecided point whether the saturation or the extra crushing should be credited with the increased yield of juice. Probably both assist, but it has been proved that the return of juice is raised from sixty per cent to seventy-five per cent by previously slicing the canes longitudinally without any application of water or steam.

A process known as the "Diffusion" system differs from those already referred to, inasmuch as, instead of rupturing the cells, which is done both in crushing and macerating, the sugar and other cell contents are assisted to escape through the cell walls, and, to a certain extent, are purified in the process. The following explanation of the system, from Warnford Locke's "Sugar," will briefly and clearly explain the process:—

The constituents of the cane juice and their relative proportions may be classed under two distinct groups—*(a)* crystalloid, including the sugar itself and the other "salts" which are capable of assuming a crystalline form; *(b)* colloid (glue-like), embracing the gummy or mucilaginous matters which are not capable of crystallisation. In cane juice these two classes of bodies exist in most intimate association in the cells of the plant. Now, these two classes are distinguished from each other by a remarkable physical fact, which forms the basis of all modifications of the "Diffusion" system. This fact is the difference which they manifest with regard to the power of passing through moist water-tight membranes. The bodies belonging to the series *(a)*, when dissolved in water, will pass through moist mineral and vegetable membranes, such as gut, parchment, plant cells, parchment-paper, &c., when there is water on the other side. Those belonging to the series *(b)* are not possessed of that property. This method of separating bodies is termed dialysis, osmosis, or diffusion, and the membrane which effects the separation is called a septum or dialyser. The dead cell walls of the sugar cane itself form an excellent dialyser; therefore, by cutting the cane into convenient slices and soaking these in water, the crystalloid constituents of the juice (including the sugar) will pass through the cells and into the surrounding water, while the colloid, or gummy and albuminous bodies, will mostly remain within the cells. Thus the juice is at once more or less completely purified of these gummy and albuminous matters, which are the principal sources of trouble and loss in sugar making, and is, at the same time, far less contaminated with the vegetable *débris* resulting from the mechanical breaking up of the cane.

The details of classification of the juice, concentration, granu-

lation, and curing and refining are of such a complicated and mechanical nature that we can do little more than give a brief sketch of the processes and the results aimed at. After the juice is collected, whether by expression or by the other systems referred to, it is filtered, clarified, and evaporated as quickly as possible to prevent its turning sour. Lime in some form is used to separate the feculent matters contained in the juice, and at the same time to neutralise the acid which so rapidly forms. It is afterwards subjected to a very quick boiling, which causes the evaporation of the watery particles, and reduces it to the proper consistency to enable it to crystallise when cool. When this is effected it is put into casks to drain. The drainings or fluid matter, which is the non-crystallisable portion, forms molasses, while the remaining crystallised portion is muscovado or raw sugar, in which form sugar is exported to this and other countries. The processes here referred to appear very simple, but they have their attendant difficulties. Great care, for instance, is required to prepare all the details and prevent delay lest fermentation should ensue. In the rapid boiling again care has to be exercised to prevent burning or blackening. There are many ways in which the whole of the saccharine matter contained in the canes may not be turned to profitable account: first, in the imperfect expression of the canes themselves by which a quantity is left in the crushed refuse canes, which are known as megass or begass. In the process of clarifying also loss frequently ensues, as well as by the drainings from the hogsheads on the voyage and in the docks. Of course, the quantity of saccharine matter contained in the canes varies according to the variety cultivated, and it is also affected by soil and other causes.

BEET SUGAR.

The beet (*Beta maritima*) is a hardy biennial, native of the shores of the Mediterranean and of the western coasts of Europe, and cultivated for a very long period in France, Germany, Holland, Belgium, Austria, Russia, and more recently introduced into North America and New Zealand. The discovery of the presence of sugar in the root of the beet by a Prussian chemist dates from 1747. It was not, however, till some forty years later that another chemist named Achard, of the same nationality, carried the experiments further, and it was due to his energy that the beet became a commercial sugar-producing plant. In this connection in later years the well-known firm of Vilmorin, of Paris, has played a conspicuous part in the improvement of the sugar beet. Mons. H. L. Vilmorin, the present representative of the Paris house, writing on the subject of "The Improvement of the Sugar Beet" in the *Kew Bulletin* for 1897, p. 317, says:—

When Achard nitiated the manufacture of sugar from beet root the white

field variety was judged the most suitable for sugar making; it contained 8 to 10 per cent of its weight in pure sugar. Selection was then brought to bear on the existing variety, and in fifty years slightly increased the percentage of sugar, raising it to 12 or 13 per cent (of the gross weight of the root). After 1850 more accurate means of ascertaining the amount of sugar in each individual root were introduced by my father, and in a dozen years a race was established yielding 16 and even 18 per cent of sugar. The fibrous tissues of the root which hold most sugar had been developed and the cellular tissues reduced to the utmost extent; hence the root became small, hard, dry, and easily deformed. Ever since the object has been to unite a better shape with an equal amount of sugar. Beet roots containing more than 18 per cent of sugar cease to vegetate properly and die.

Before proceeding to consider more in detail the selection of the best varieties of beet as sugar producers it may be well to give a sketch of the progress of its culture on the Continent from the time of Achard. Notwithstanding that he characterised the beet as "one of the most bountiful gifts which the Divine munificence has awarded to man upon the earth," the plant failed to produce at the time, that which was prophesied for it, and perhaps the subject would have rested there had not the decrees of Napoleon I. been instrumental in raising the price of cane sugar to about 5s. per pound, thereby placing it beyond the reach of a large number of the French community to whom sugar was an article of the first necessity. This, consequently, gave rise to great dissatisfaction, so that the Emperor was obliged to turn his attention to the best means of obtaining a good supply from plants of home cultivation, which he did by offering prizes for such a successful manufacture. This acted as a stimulus for further investigation of the beet. Experiments now began to give very satisfactory results, and by 1812 the manufacture of beet root sugar had obtained a firm footing in France, and at the end of the first year the profits obtained were immense. Beet sugar now became largely consumed in France till the year 1814, when, peace being proclaimed, the West Indies again began to send their cane sugar into the French markets. This had the effect of immediately driving the beet sugar into the background. Sugars were admitted into the French ports at equal rates of duty, whether from the French, English, or American Colonies. Sugar from the English Colonies was preferred to that from Bourbon Martinique and Guadaloupe, and it was seen that protection must step in to serve their own Colonies, consequently a duty of 20 francs the 100 kilos was levied upon all foreign sugars. This duty was increased three or four times till the year 1822, when it reached 95 francs the 100 kilos, actually amounting to a prohibition. From this time the beet root sugar manufacture began again to flourish, and in 1829 about five million kilos were produced, which was then equal to about a sixteenth of the total consumption of sugar in France. From this period the growth of the beet for

sugar making in France and Germany has continued to increase, and its cultivation for the same purpose in this country has found some very strong adherents.

In 1837 a refinery solely for the purpose of treating the beet root for sugar, was established at Chelsea, and many acres of land round London, especially in the neighbourhood of Wandsworth, were afterwards devoted to its cultivation. This land, however, has long ceased to grow beet, and has been for years past covered with human habitations. Many other attempts have been made to grow the beet both in England and in Ireland, and about 1868 its cultivation was begun and works set up at Lavenham, in Suffolk, which it was estimated would, when fully employed, work up about sixty tons of beet per day. In 1870 the cultivation was extended at Lavenham, as well as in Berkshire, Yorkshire, and in Ireland, the results of which were reported to be very satisfactory, both in the crops and in the percentage of sugar in the beets grown. Indeed, Dr. Vœlcker, in a paper read before the Society of Arts in March, 1871, summed up the experiments in the following words:—

The summer and autumn of 1870, no doubt, were highly conducive to the development of much sugar in root crops, and probably the beet roots which were raised in England and Ireland in 1870 were richer in sugar than they are likely to be in average seasons. Still, considering that we now have three years' recent experience on the cultivation of sugar beets, I cannot see any reason why this crop should not be profitably cultivated in many parts of the United Kingdom. In a good season I believe from eighteen to twenty tons of beets of as good a sugar-producing quality as in France or Belgium may be grown without much difficulty. The farmer will run very little risk by trying the experiment to grow sugar beets instead of common mangolds, for if he cannot obtain a good price for his roots from the sugar manufacturer he can use the beets for cattle food, and, although he may not grow so heavy a crop as he does when he plants mangolds, it has to be borne in mind that one ton of sugar beet is quite as valuable for cattle food as at least one and a half tons of good common mangolds.

Although great success has attended the growth of sugar in the North of Europe, many people in this country question whether an equally satisfactory result would characterise its introduction into England. Indeed, the notion is a very common one that our English summers are not warm enough to ripen sugar beets sufficiently. This idea is based on the supposition that sugar beets require a great amount of heat for coming to perfection. It is, however, altogether erroneous, for experience has proved that our English summers are quite warm enough to produce beets as rich in sugar as those grown in the North of France or Belgium. Moreover, sugar beets are actually not cultivated with advantage in a country possessing a high summer temperature.

The average temperature of the Continental beet-growing countries, and of the localities in England where beets may be grown with advantage, is pretty much the same, and ranges from 62° to 65° Fahr. It is not so much heat as a dry and unclouded sky during the autumn months which makes the sugar in the beet, and hence the crop succeeds far better in the North of France and of Germany than in Central France or the South of Germany, where the summers are very much longer and warmer than in the northern districts. It has been justly observed that a bright and dry August influences the percentage of sugar in roots to a far greater extent than the summer's heat. Experience has further

shown that nothing is more conducive to all heavy crops than abundance of rain distributed over the first two months of its growth. Keeping in view the climatological condition which regulates the healthy growth of beet, which is eminently a plant suited to countries having a comparatively low average temperature, I have come to the conclusion that the eastern, south-eastern, and northern counties of England, and even many localities in Scotland, as well as a part of Ireland, as far as climate is concerned, are well adapted for the cultivation of sugar roots.

A large number of varieties of the beet are known to cultivators; the most important, however, from our point of view, namely, that of a sugar producer, is that known as the White Silesian Beet, but even this variety is known under several forms. The most perfect of this is pear-shaped, growing about one foot into the soil, and giving off numerous rootlets. It does not grow above the ground so much as the other forms. The flesh is white, but of the two principal varieties the skin of one is white, with green leaves, while the other has a rose-coloured skin and purple-ribbed leaves. Both varieties are often grown in the same crop, and are equal in their yield of sugar.

As some guide for the selection of good sugar beets the following characters have been given: The roots should have a regular pear-shaped form and smooth skin. In the Silesian beet a long and tapering root is an indication of inferior quality. They should not throw out forks, or fingers and toes. The flesh should be white, firm, of uniform structure, clear, and of a sugary flavour. The thick-skinned beets are frequently spongy in texture and watery in composition. The weight of a good beet root should average from 1½lb. to 2½lb. each. Neither very large nor very small roots are profitable sugar producers. As a rule those above 3½lb. in weight are watery and poor in sugar, and very small roots of less than ¾lb. are either unripe or too woody to yield much sugar. As the soil and season have a great influence upon the composition of the crops, it is quite possible, in a favourable season, and with proper cultivation, to produce beets weighing over 4lb. which nevertheless yield a good percentage of sugar. Good sugar beets show no tendency to become what is termed "necky," and their tops are always smaller than those of inferior sorts. Good beet roots are considerably denser than water, and quickly sink. The specific gravity of the roots affords a pretty good test of their quality, for, as a rule, the greater their specific gravity the richer in sugar they will be found. In a well-cultivated soil the roots are entirely buried in the ground, and produce moderate-sized leaves. This tendency to bury itself in the ground is a further indication of a good quality beet.

Amongst the best varieties raised by Messrs. Vilmorin, of Paris, the following may be mentioned:—The "White Silesian

Sugar Beet," from which all the white varieties now grown have originated. It yields 12 to 14 per cent of sugar, or from a produce of from 39,600lb. to 44,000lb. of roots per acre the sugar yield is estimated at 5,720lb. This variety is shown at Fig. 3, Plate 7. "Vilmorin's Improved White" is a variety obtained direct from the foregoing, and is the richest of all in the yield of sugar, giving from 15 to 18 per cent, and the juice is exceedingly pure, though the return per acre is said to be smaller than other kinds. In those countries where the duty is levied on the roots this variety is most highly esteemed. It is represented at Fig. 4, Plate 7.

The sugar present in fairly ripe beets is crystallisable, and, when perfectly pure, identical in composition and properties with crystallised cane sugar. The following notes on the sowing, cultivation, and harvesting of the sugar beet are condensed from the valuable work on "Sugar" by Locke and Newland:—The best time for sowing the seed is the beginning or middle of April. By too early sowing the young plants may be injured by frost, while, on the other hand, if sown later than the first week in May the crop runs the risk of not sufficient ripening before being taken up in the autumn. From 10lb. to 12lb. of seed is required per acre. Generally speaking, the distance between the rows and from plant to plant should not be less than 12 inches nor greater than 18 inches. Should the young plants be caught by an early spring frost, however slightly, it is best to plough up the crop at once and sow again, for plants attacked by frost are certain to run to seed, and such plants are practically useless for the manufacture of sugar. Sugar beets, like most root crops, require to be frequently horse and hand hoed, so long as the roots themselves are not injured by the hoe; the more frequently it is used the better it is for the plants, and it is further advisable to bring the soil well up round each plant in order to completely cover the head of each root. Sowings should not be made on freshly manured land, nor should strong forcing manures be used at all on beet root land. Weeds should be removed as quickly as they appear, and the thinning out of the plants should be done as early as possible. The leaves of the beets themselves should never be removed during growth, and the roots should not be lifted before they are quite ripe; but, on the other hand, care must be taken to harvest them before frost sets in. The stage of maturity is indicated by the leaves turning yellow. If the autumn is cold and dry the crop may be safely left in the ground for a week or ten days longer than would be otherwise necessary, but should the autumn be mild and wet it is very desirable to remove the roots as soon as possible after they arrive at maturity, for if left in the ground they are apt to throw up fresh leaves, which, of course, impoverishes the

root considerably. It is, therefore, necessary to carefully watch the ripening of the crop, and from time to time to test the gravity of the expressed juice, which may be done by taking up a root or two at intervals and reducing them to pulp by grating on an ordinary hand grater. By squeezing this pulp through calico the juice thus obtained can be tested with an ordinary float used for ascertaining the density of liquids heavier than water. As long as the gravity of the juice continues to increase when the roots are tested from time to time the crop should be left in the land. The juice of beets of good sugar-yielding qualities has a specific gravity of about 1·065, and when rich in sugar it rises to about 1·070.

Immature or unripened roots, cut across with a knife, rapidly change colour on the cut surface, turning first red, then brownish, and finally quite dark. In this case the ripening process may be considered as not completed, but if the cuts remain for some time unaltered, or turn only slightly reddish, it may be assumed that they are sufficiently ripe to be taken up. By this simple means the state of maturity may be ascertained with sufficient accuracy for practical purposes. Fine dry weather should be selected for the harvesting, and, in order that the roots recently removed from the ground may part with as much moisture as possible, they are best left exposed to the air on the land before they are stacked, but they should not be left more than a few days, and should be protected from the direct rays of the sun. Various plans are adopted for the storage of beets according to the countries where they are grown, but the broad principle may be said to be similar to that adopted in this country for the storage of potatoes and mangolds.

Before proceeding to the processes of rasping and pressing the roots they have to be carefully cleansed by a system of washing and stoning, as stones are often hidden amongst the fibrous roots and dirt. The rasping is a purely mechanical operation by which the beets are reduced to a pulp, which is afterwards submitted to hydraulic pressure. The other systems in use are, as in cane sugar, maceration and diffusion. The subsequent processes of clarifying and crystallising are too technical to enter upon here. Suffice it to say that the resulting sugar, which at one time was not difficult to detect from cane sugar, is now, owing to the perfection of its manufacture, equal in appearance to that of the older product.

MAPLE SUGAR.

Another very important source of sugar is that which is obtained from the North American sugar maple (*Acer saccharinum*). The tree, which is closely allied to the common maple of our own country (*Acer campestre*), grows to a height of from 60ft. to 80ft. It is a rapid grower, and it is said that trees of ten or fifteen years

old are capable of yielding a large quantity of saccharine juice. The species forms extensive forests in Canada, New Brunswick, and Nova Scotia, and it has been computed that in the two States of New York and Pennsylvania ten millions of acres are covered with these trees in the proportion of thirty to an acre. The manufacture of sugar from this tree forms a remunerative adjunct to other farming industries, the season for collecting the juice being in the month of March, often while the snow is yet upon the ground, and before the work of spring has actually commenced. Besides which the apparatus required for collecting the juice is very simple, and requires only a small outlay. The quantity yielded by the trees varies considerably according to the changes of weather. Though the collection of the juice usually takes place in March, the rising of the sap commences immediately after the first break up of the long frost, from the middle to the end of February, through March, and into the early days of April, varying, however, in different localities.

The period at which the flow of juice commences varies not only with the season but with the position of the ground upon which the trees grow, being earliest in warm situations. So sensitive are the trees said to be to aspect and climatic variations, that the sap in the same tree has been noticed to flow earlier on the south and east sides than on the north and west. The collection continues for about a month or six weeks, and decreases as the foliage is formed. The yield is also said to be affected by the nature of the previous summer; a plentiful rainfall and sunshine produces an abundant sugar harvest in the following spring. The juice is further said to be the sweetest in open winters, and alternate frost and thaw improves the quality and increases the quantity. That from isolated trees is richer in sugar than that obtained from trees growing thickly together.

The produce of sugar varies from one pound to every six gallons of sap to one pound to four and a half or five gallons, or even one pound to three gallons. An average tree will furnish three gallons of juice in a day, and produce about four pounds of sugar in a season; but as much as ten to forty pounds of sugar have been obtained from a single tree. The trees are not usually tapped under the age of twenty-five years, as the result is comparatively small, besides which it weakens the trees in after years. In the case of trees of mature growth frequent tappings are said to have no effect upon their health and vigour, as it is known that individual trees have furnished full quantities and good quality sugar for forty successive years.

The tapping is done by boring a hole into the trunk with an auger to a depth of one to one and a half inches, and usually at a

distance of from three to four feet from the ground. A perforated plug or spout is driven into the hole so made, to convey the juice into vessels placed below to receive it. One to three tappings are made in the trunk at the same time, and in successive years the tree is tapped on the opposite side.

The evaporation of the juice is effected in shallow copper or iron boilers, the former metal being preferred as it is said to produce a whiter sugar. During the process of evaporation the boilers are kept constantly filled by the addition of fresh juice, until the syrup attains a certain consistency, which is proved by its crystallising when dropped into cold water. The syrup is strained during evaporation, and lime or soda is added in small quantities for the purpose of neutralising any free acids. The white of eggs or milk are also used to clear it. After straining and skimming the syrup is passed into pans to crystallise, and is sometimes further clarified by a gentle boiling in cans tapering towards the bottom, at which is a tap through which the molasses may be drawn off as the crystallised sugar sets. With regard to the produce of maple sugar, it has of late years much decreased, due, it is said, to some extent to the wholesale cutting of the trees for conversion into broom handles and numerous other applications to which the wood is suited. The wens or burrs, for instance, which are frequently formed on the trunks give the well-known bird's-eye maple of cabinet-makers. It is difficult to obtain accurate statistics of the amount of maple sugar made in America, as it is more a product of home use by the producers, than an actual article of commerce for conveyance even to the several States of America; besides which, a large quantity of the juice never passes through crystallisation, but is used as syrup for various culinary purposes. Nevertheless, from official records it would seem that in 1850 the production amounted to some 15,520 tons, which rose in 1858 to 24,000 tons, and in 1860 and 1861 to an average of 27,000 tons, after which the produce declined, though its value in 1885 was officially stated to amount to about £550,000.

The following notes from the *Louisiana Planter* of February 2nd, 1895, give the most recent information available on the production of maple sugar:—

During the existence of the Bounty law it was thought that data would be secured covering the entire production of maple sugar in the United States, but the great number of small producers who made no application for the bounty, owing to the small amounts involved, has rendered the data very incomplete, although the total production of this article is far greater than most persons imagine. From the last report of the Commissioner of Inland Revenue we learn that the maple sugar produced during the fiscal year ended June 30th, 1892, by the licensed maple sugar producers who submitted reports, amounted to a little short of four millions of pounds. During the fiscal year ended June 30th, 1893, the production reported aggregated over 7,500,000 pounds, and

for the year ending June 30th, 1890, the data secured indicates about the same production. From this it would seem that the total production of maple sugars in the United States exceeds 10,000,000 pounds, and as this article is sold as candy rather than sugar, and as an immense amount of maple molasses or syrup is sold without being manufactured into sugar, it is evident that the total production of sugar and syrup from maple reaches about $1,000,000 annually. New Hampshire leads in maple sugar production with a yield of about 5,000,000 pounds; New York follows with the production exceeding 1,500,000 pounds; Pennsylvania about half a million; Ohio a little less than half a million; other States reporting smaller quantities. Over 3,600,000 trees were tapped to produce 7,500,000 pounds of sugar, indicating an average production of about two pounds per tree per season.

SORGHUM SUGAR.

Another source of American sugar to which a considerable amount of attention was given a few years ago is obtained from the Sugar Sorghum or Broom Corn *(Andropogon Sorghum var Saccharatus)*, which at one time was thought might become an important industry. It is a tall-growing grass, allied to the true sugar cane, but producing a much more slender and less woody stem. The plant is largely cultivated in Northern India, China, and Japan, as well as in the United States. It does not seem, however, to be a native of any of these countries, but probably hails from Tropical Africa. Notwithstanding the attempts in America to cultivate the plant as a source of sugar in a zone north of that in which the sugar cane is grown, the results have not been very successful, as the sugar can only be obtained for the most part in an uncrystallisable form. As syrup, however, is largely consumed in the United States, the plant may be found useful in supplying this article.

A paper on the subject appeared in the *Louisiana Planter* for December 1st, 1894, from which the following is extracted:—

> Sorghum manufacture consists in making syrup and sugar. It is a common way to measure the sorghum industry simply by its yield of sugar. The value of the sorghum syrup product of the country is greater than the value of the sorghum sugar. In small factories syrup only is produced, and in large factories syrup, sugar, and molasses are produced. The sorghum crop is of sufficient importance in twenty-four States to be reported monthly by the Government Statistician, along with sugar cane, rice, wheat, corn, and other leading crops of the country. The season for sorghum manufacture usually begins in August. At that season sugar cane syrup is not found in the market. There is then a great demand for the "new crop syrup." At the beginning of the season the syrup factories find a home market for their product, and the sugar factories use quantities of cane which is not fully ripe in the manufacture of syrup.
>
> The beet sugar factories and the sorghum sugar factories have a considerable advantage in the fact that there is usually an active demand for sugar in the months of August and September, for use in preserving fruits. As a rule, sugar brings a higher price in those months than it brings in the months in which Louisiana sugar is marketed, and sorghum has an advantage over beet manufacture in the fact that it is possible to make a fine sorghum syrup during

the months when the market is bare of syrup, or, whenever syrup pays better than sugar, sugar refiners utilise a part of the residues of sugar refining by converting them into syrup, and it is said that there is sometimes more profit in the syrup made from the residues than in the refined sugar, for the reason that syrup sometimes brings a relatively higher price than sugar. It seems probable that, for a time, the production of fine uncrystallisable syrup will form a considerable part of the output of sorghum sugar factories, and that only the best cane, which alone is profitable for sugar manufacture, will be worked for sugar, and that unripe canes at the beginning of the season, inferior cane during the season, and frosted cane at the end of the season will be worked for fine syrup, as the inferior residues of sugar refining are worked for fine syrup. So far, the sorghum sugar factories have worked mainly for raw sugar and incidentally for cane syrup. The result has been a small yield of sugar per ton of cane worked for sugar, a large yield of molasses which includes a considerable amount of sugar which cannot be extracted profitably, and inferior syrup, which requires the manipulation of the mixers to fit it for use. It is not difficult to make a fine uncrystallisable syrup from sorghum, which is superior for many purposes, if not for all, to the common mixed syrups. Considering the immense sale of mixed syrups, there seems to be room for a syrup which can be produced at a low cost, and which is superior to the mixed syrups. There seems to be little profit in producing an inferior quality of syrup which is wanted only by mixers, as there is little profit in producing articles of low grade in any line. At present it is much easier to improve the manufacture of syrup than it is to immediately improve the extraction of sugar from molasses. The latter is a problem which long troubled sugar cane and beet sugar manufacturers, and it requires time for the sorghum industry to work out that problem, as it required time in the sugar cane and the sugar beet industries. While an increase in sugar yield is, and should be, the main object of the sorghum sugar factories, yet, while accomplishing this object, it seems necessary to utilise the cane in the best possible way with regard to immediate financial results.

The processes for the extraction of the juice from the sorghum stems, and its subsequent treatment for conversion into sugar, are very similar to those adopted with the sugar cane, but are for the most part of a smaller and lighter character. Besides its culture in America the plant has also been grown in Australia and Natal, as well as in this country.

PALM SUGAR.

Amongst the sugar-yielding palms of India the most important is the Wild Date, or Date Sugar Palm (*Phœnix sylvestris*), which is indigenous in many parts of India, being most abundant in Bengal, Behar, on the Coromandel Coast, and in Guzerat, and forming extensive forests in Rohilkand. It attains a height of 30ft. to 40ft., and is a very valuable tree for other purposes besides that of sugar making. The most important sugar producing district from this tree is Jessore, where it is said the industry is an old one, it having been a source of income to the people so long back as 1788.

In making plantations of these trees in Jessore the site is generally chosen on high ground, and the trees are planted in regular rows, giving a distance of about 12ft. between each tree. They are ready for tapping at about the age of seven years, and are

tapped every year after. To prepare for the actual tapping the lateral leaves at the top of the trunk are removed and a V-shaped cut is made in the bared portion, and from these cuts the sap exudes, running down to the base of the V, from which it is conveyed in a kind of spout formed of bamboo. The tapping is carried on throughout the season at periods of six days. The cut is made in the evening, and the juice allowed to run during the night, trickling into a bamboo pot. In the morning the pot is removed, and the heat of the sun causes the exuding juice to ferment over the wound, thus closing the pores and preventing any further flow until another cut is made in the evening, when the operation repeats itself. The first flow of juice is considered the strongest and best quality. On the third night no new cut is made, but the wounded surface is made quite clean, and the juice again flows, in less quantity and of still an inferior quality, and at the end of the season the juice becomes unfit for sugar making. The cuts during the whole of one season are made on one side of the tree, and in alternate seasons alternate sides of the tree are operated upon; and as each season's cutting is above the previous season's, and on the opposite side, the stem presents a curious zigzag appearance. The instrument used in cutting the trunk is a peculiar kind of billhook. The collector ascends the tree with the aid of a thick rope, which is fastened loosely round the trunk and the collector's waist, and then, by leaning back against the rope and pressing his feet against the trunk and alternately raising the rope with his hands and stepping upwards, he easily and quickly climbs to the top, when he commences the operation of tapping. (See Plate 12.) The collecting of the juice is commenced a little before daybreak, and so soon as a sufficient quantity is collected for a boiling the operation is commenced forthwith in a very simple and primitive fashion. As the contents of the vessel diminish by evaporation it is filled up with fresh juice, the boiling being continued till the sugar arrives at the proper granulating consistency. The boiling of each pan occupies about five or six hours, when it is put into an earthenware pot or jar, and in this state it is sold to the sugar makers, who complete the process.

With regard to the yield of sugar from this species of *Phœnix*, it is well known to be affected both in quantity and quality by changes of weather. Dry and cold weather is said to be most favourable, and the best season for collecting in Bengal is from the beginning of November till the middle of February. It has been estimated that some of the advantages of date sugar over that of the cane in India are that the former can be produced at about two-thirds of the cost of the latter of equal quality; further, that the produce incurs little or no risk, and a comparatively small outlay in cultivation.

One of the most important palms of the Malay Archipelago is that known as the Gomuti or Ejoo Palm (*Arenga saccharifera*). Besides being indigenous in Malacca and Malaya, it is also said to be found wild in Burma and Orissa. The tree grows to a good size. The sugar is derived from the saccharine juice or sap, which is obtained by a system of tapping the young spadix or fruit spike. The collector ascends the tree on three successive days, and beats the spadix with a small thick stick with the view of drawing the sap to the wounded part. The spadix is then cut a little way from its base, and the liquor which flows is collected in pots. The palm is said to be in a fit condition for tapping at the age of nine or ten years, and will yield the juice at the rate of three quarts a day for two years. When freshly drawn the liquor is clear, but shortly becomes turbid, whitish, and has an acid taste, fermentation quickly ensuing. In this state it is known as toddy, and large quantities are consumed. For the purpose of converting it into sugar the liquor in its fresh state is boiled and evaporated to the consistency of syrup and put out to cool in small vessels, in which shape, when solidified, it appears in the markets. It is of a dark brown colour, and has a peculiar clammy consistence and a clogging taste. The number of spadices produced on one tree at any given time is on an average two, though it is not uncommon to see three. When by any circumstance the owner of the tree is prevented manufacturing sugar, or jaggery as it is always called, it is converted into vinegar by allowing it to stand in a jar for a few days, when fermentation ensues. Each spadix makes its appearance on the tree before the old ones are exhausted, so that a tree is kept in a state of productiveness for a number of years, the first one appearing at the top of the tree, the next lower down, and so on till, after the production of the lowermost, the tree dies. Each spadix, it is said, will yield juice or toddy for at least three months, and sometimes even for five months. Besides the yield of toddy and sugar for which this tree is noted, it is also famous as being one of the sago palms, one trunk having been known to furnish as much as 150lb. to 200lb. of good commercial sago.

The well-known Palmyra Palm of India and Ceylon (*Borassus flabellifer*) is another fruitful source of sugar to the people where the palm is abundant. It forms a very tall, cylindrical stem, covered with the scars of fallen leaves, and crowned at top with a fine spray of these leaves. This is one of the most useful of all the palms, for every part of the tree has some application. It is, however, only with the juice, or toddy, that we have to deal, and this, indeed, is the most important product of all. It is obtained from the spadix in a very similar manner to that described under *Arenga saccharifera*, namely, by tapping. This is

done before sunrise, when the exudation is sweet and agreeable to the taste, and while fresh forms a very pleasant beverage. After sunrise the juice rapidly ferments and becomes a powerful intoxicant. The palmyra is the chief toddy, sugar, or jaggery yielding palm of South India, the Concan, Burma, and Ceylon. The mode of collecting, though somewhat varied in different localities, is practically the same, and the following account of its collection in Ceylon will give a good idea of what is practised in India. At the season when the inflorescence begins to appear, the "toddy-drawer" is at work in the palmyra groves. His practised eye soon fixes on those trees fit for the scalping-knife. An expert climber can draw toddy from about forty trees in a few hours. The juice of the palmyra is richer in saccharine matter than that of most other palms, in consequence, perhaps, of the tree more generally growing in dry, sandy soil and in a dry climate. The great fault of the jaggery made at Jaffna seems to arise from the too free application of lime, a small quantity of which is absolutely necessary to prevent fermentation. It is estimated that three quarts of toddy will make one pound of sugar. The process of manufacture is exceedingly simple, the toddy being merely boiled, as in the other palms referred to, till it becomes a thick syrup. When it has attained a proper consistency it is poured into small baskets, made of the palmyra leaf, when it cools and hardens into jaggery. In these baskets it is kept for home consumption, or exported for the purpose of refining. To make crystallised jaggery, which is extensively used as a medicine, the process is nearly the same as for common sugar, except that the syrup is not boiled so long. Toddy is extensively used as yeast, and throughout Ceylon little else is so used by bakers. Quantities of it are also converted into vinegar, and used for pickling gherkins, limes, &c.; but by far the greatest quantity is boiled down for jaggery or sugar.

The wine palm of India (*Caryota urens*) is another well-known source of toddy or palm wine, which, after being collected by wounding the spathe, is boiled and evaporated in the manner already described. Roxburgh says that the trees yield the toddy at the rate of one hundred pints in twenty-four hours. The tapping is carried on when the trees are between the ages of fifteen and twenty-five years, and the tapping goes on for eight months in the year—until, indeed, they are exhausted. The boiling and preparation of the sugar is similar to that already described with other palms. *Caryota urens* is a very valuable palm for other reasons besides those of a toddy and sugar producer. Some sago is obtained from the trunk, and a valuable hard fibre, known as kittool, is produced around the trunk at the base of the

leaves, which is much used for brush and broom making as a substitute for bass.

The cocoa nut (*Cocos nucifera*), perhaps the best known and most important of all the palms, furnishes amongst its numerous other products a quantity of sweet juice or toddy from the spathe, which, when boiled, forms sugar. We may, indeed, say, in short, that the presence of this vinous juice in the spathes and spadices and often in the trunks of growing palms is more general than might be supposed, and might, perhaps, be more extensively used than it is as a source of sugar in many parts of the tropical world where palms abound.

That there is no lack of sugar in the world, but, on the contrary, that it enters into the composition of most plants, is a well-known fact. In the carrot, parsnip, potato, apple, pear, and in most fruits sugar is present—in some, indeed, to a much larger extent than any other of their individual constituents. The wholesome and nutritious nature of sugar is well exemplified by the appearance of the native employés, who are said to grow sleek and fat after working in the sugar cane fields and frequently sucking the fresh juice of the cane. In every country, civilised and uncivilised, people are fond of sugar, and will have it, especially when it is to be obtained at the low rate that it has been for several years past, and with all the sources of supply, which might be doubled if necessary, there is no reason why sugar should not continue to be in as great demand as ever, if not increasingly so.

The value of sugar from a medicinal point of view is summed up by Bentley and Trimen in their "Medicinal Plants" as being of little importance. They say, however, that—

> In the form of lozenges, sugar candy, &c., it allays tickling cough by slowly dissolving in the mouth. It is nutritious, but, in consequence of not containing nitrogen, it is not capable in itself of supporting life. It is a powerful antiseptic, and is largely used for preserving meat and fruit. The popular notion that sugar is injurious to the teeth is unfounded, as a solution of sugar has no action on the teeth. In pharmacy sugar serves to preserve, to give flavour, bulk, form, cohesiveness, and consistence.

With regard to imports and consumption, it may be interesting to note that in 1854, when, in consequence of the Russian War, the sugar duties were increased, the consumption per head fell from 34lb. to 30lb., in 1855 and in 1856 to 28lb. The large supplies in 1858 led to an increased consumption, and it rose to 34lb. per head. Since then it has gone on increasing. In 1864 it amounted to about 486,833 tons, or at the rate of about 42lb. per head.

In 1898 the total imports of sugar and molasses, exclusive of glucose, amounted to 32,465,491cwt., against 30,549,860cwt. in 1897. The value of these quantities amounted in 1898 to

£17,556,678, and £16,197,186 in 1897. The items from each country were made up as follows for the year 1898:—

From REFINED SUGAR AND CANDY.	Cwts.
Germany	11,323,874
Holland	2,297,155
Belgium	466,295
France	2,258,277
United States, America	7,780
Other Countries	66,061
Total	16,419,397

From UNREFINED SUGAR.	Cwts.
Germany	5,641,672
Holland	337,297
Belgium	1,489,074
France	2,039,542
Java	562,845
Philippine Islands	898,158
Spanish West India Islands	14,380
Peru	1,002,197
Brazil	442,576
Mauritius	62,614
British East Indies	412,690
British West India Islands, British Guiana, and British Honduras	906,195
Other Countries	883,666
Total	14,692,906
Molasses	1,353,188
Total of Sugar and Molasses	32,465,491

During the period to which these figures refer refined sugar and candy show an increase of 333,504cwt., of the value of £222,397, over those of the preceding year, while unrefined sugar gives a decrease of 361,238cwt., valued at £128,813, against those of 1897. On the other hand, molasses increased to the extent of 84,114cwt., of the value of £20,983.

While this article is being concluded some interesting facts in connection with the sugar industry of India and some foreign States are appearing in many of the British Consular Reports. With regard to Indian sugar, the *Times* says a return has been presented to the House of Commons showing for the years 1882–83 to 1898–99 inclusive (1) the quantity and the value of imports of sugar into India from Germany, Austria, and Mauritius; (2) the average of sugar-cane cultivation in the several provinces of India; (3) the

quantity of refined Indian sugar exported from Bengal and the North-West provinces to other provinces of India and to the native States; and (4) the quantity of Indian sugar, refined and unrefined, exported to Ceylon, to the United Kingdom, and to other countries. The quantity imported from Germany steadily increased from 1889–90 until 1897–98, when it reached a total of 1,203,309cwt., but during eleven months of 1898–99 it was only 396,352cwt. The supply from Austria was 3,087cwt. in 1889–90, 945,745cwt. in 1897–98, and 921,804cwt. in the eleven months of 1898–99. The arrivals from Mauritius have not varied much during the above ten years, and the figures for the eleven months of 1898–99 were 1,592,636cwt., which is more than for any previous complete year. The total acreage under sugar cane in India has fluctuated a little from year to year, with, on the whole, a tendency to increase until 1891–92, but since that year, when it reached 3,100,147 acres, it has fallen off, the area for 1897–98, the last year given, being only 2,675,763 acres. This latter figure includes, however, an estimate for Bengal. The exports of refined sugar from Bengal to other parts of India had fallen off a good deal up to 1896–97, the last year for which statistics are available, but those from the North-West provinces and Oudh to other provinces have been fairly maintained since 1886–87, though they have diminished since 1893–94. The shipments of sugar, refined and raw, to over-sea countries, including Ceylon, have fallen off very much during the seventeen years under review, and especially since 1889–90. In that year the export to the United Kingdom was 1,168,354cwt., in 1897–98 it was 447,070cwt., and for the eleven months of 1898–99 221,816cwt. Turning to foreign countries, and taking them in the chronological order of publication of the respective reports, we take the following:—

Java.—The total crop for the year 1898 amounted to 11,349,523 piculs, against 9,025,617 piculs in 1897. This is considered a record crop, the cause of which is explained as follows:—

> Under the somewhat favourable conditions prevailing during the last year both for gathering the crop and for getting the next one into the ground, several of the new sorts of cane, both imported and derived from seed, have continued to give satisfaction, so that a more extended use of them has been made, and a further extension is certain to be effected during the next planting season. It is not, however, expected that Cheribon will be entirely displaced, as none of the new sorts have been proved to be equally good under varying circumstances of weather and ground.

The prospects for the growing crop are said to be good, and provided climatic influences are favourable the crop of 1899 should not fall short of its predecessor.

Kieff, Russia.—The beet crop has been anything but favourable from the planter's point of view, and cannot be considered as

a profitable one on account of the heavy expenses caused through the unfavourable season. The spring was dry and unfavourable for germination, and a considerable area had to be resown. The first half of May was notable for great heat, and much damage was done through the ravages of the innumerable insects which seem specially to attack this crop. In consequence of the smallness of the tubers, the ravages of the insects, and the visitation of frost, there was practically a panic, as it was thought half the roots would be left in the ground. Several sugar factories had actually to close owing to the want of roots, but the crop was saved by a favourable change in the weather. The measures adopted for getting rid of insect pests appear to be of the most primitive character, such as digging a ditch between the infested and non-infested fields, or by attempts to collect the insects by hand labour, while others go to the extent of ploughing up the land and resowing. The acreage under beet was given as 1,103,611 acres, or 99,583 acres more than was cultivated in 1897, but the estimated yield of beet root from this land was calculated at 5,770,218 tons, as against 5,837,830 tons in the previous year.

United States.—The total consumption of sugar in the United States is returned at 2,047,344 tons in 1898, as compared with 2,071,413 tons in 1897, showing a decrease of 24,069 tons, equal to a little over 1 per cent. The consumption of 1898 was made up as follows: 317,447 tons of domestic cane sugar, 33,960 tons of domestic beet sugar, 5,000 tons maple, 300 tons sorghum, and 1,700 tons molasses, making a total of 358,407 tons of domestic production; 1,432,847 tons of foreign cane sugar, 179,465 tons of foreign raw beet sugar, and 26,625 tons of foreign refined, a total of 1,638,937 tons of foreign production. The amount of refined sugar which went into consumption in 1898 was 1,855,533 tons, of which only 26,625 tons, or about 1·4 per cent, were manufactured by foreign refiners. In 1897 the figures were: Total refined sugar, 1,958,343 tons, of which 77,288 tons, or 3·95 per cent, were refined abroad. The amounts refined by beet sugar factories in the United States were 27,960 tons in 1898, and 28,051 tons in 1897. The difference in price between raw and refined sugar averages about $\frac{3}{8}$d. per pound. The importation of sugar from Europe fell from 637,426 tons in 1897 to 206,087 tons in 1898, chiefly in consequence of the countervailing duties placed on bounty-fed beet sugar. The manufacture of beet sugar is assuming large proportions in the United States. In the State of New York the factory at Rome has again had a successful year, and a new factory at Binghamton is said to be doing well; a number of factories are being built in Michigan, one in Illinois, which is likely to be followed by a second, and others are being built or are in contemplation in Iowa, South

Dakota, Kansas, Nebraska, Wyoming, Montana, and Idaho. These, with existing sugar mills, notably those in California, are expected to produce 200,000 tons of beet sugar in 1899.

HAMBURG.—It is not possible in a short summary statement to give an account of the complex causes which affected, more or less, the course and extent of last year's sugar business in this and other German markets. It may merely be observed here that the somewhat sanguine hopes entertained at the end of 1897 by the German sugar trade that the bounty system was about to be abolished in Germany and in other countries were definitely disappointed when the Brussels Conference was closed in June of last year. In view of a possibly favourable solution of the bounty question exporters had held back until that period, so that afterwards, in order to make up for lost time, they found themselves obliged to turn to North America for custom, and exportations, in particular, to that country were eventually of considerable extent. The total exportations of sugar from Hamburg to foreign countries in 1898 amounted to 9,765,000 sacks, as against 9,398,500 sacks in 1897, and 13,929,500 sacks in 1896.

AMSTERDAM.—The price of raw beet sugar during 1898 showed but little variation. In October and November prices ranged from 10s. to 10s. 3d. per cwt.; but the anticipated loss of the North American market since the Spanish-American War, and the acquisition of Cuba and very probably the Philippines by the United States, caused much depression in the market, and refiners consider their prospects gloomy, since they feel that American enterprise and capital must greatly develop the producing powers of these new possessions. They express, however, the hope that this state of things may force the Continental Governments to reduce the heavy excises charged on home consumption (24s. per cwt. in France, 11s. in Russia, 10s. in Germany and Austria, and 23s. in Holland), so that the consumption—now only averaging about 20lb. per head per annum in these countries—may, as is perfectly practicable, be doubled or even quadrupled. It is assuredly an extraordinary paradox to find this, the finest fruit-producing country in the world, with every advantage of cheap labour and cheap coal, importing nearly all its consumption of jams, &c., from Great Britain, after sending across both the fruit and the sugar to English jam manufacturers.

JAPAN.—The increase in the volume of sugar imports has been remarkable. With the rise in the standard of comfort and luxury among the labouring population the demand for sugar has grown enormously. Until just before the war the consumption of sugar by the lower classes, and by people living in the interior of the country, was very limited, but with the freer circulation of money among

such classes the taste for sugar spread, and a large and increasing importation has been the result. Last year's figures represent an increase of 22,445 tons of brown sugar, valued at £260,186, and 46,483 tons of white sugar, valued at £627,015. More than half the sugar came, as usual, from Hong Kong. The importation of beet sugar from Germany continued to develop, last year showing an increase of over 60 per cent. About £100,000 worth came from Dutch India, and there was a slight increase in the importation from China and the Philippine Islands.

Pernambuco.—The production of sugar has fallen off in this country since 1896, as will be seen from the following figures:—Total production in Pernambuco for 1896, 159,460 tons; 1897, 124,428 tons; and in 1898, 131,820 tons. While the export to foreign markets from Pernambuco amounted in 1898 to only 31,500 tons. The primary cause of the decreased production is, of course, the baneful influence of bounty-fed sugars, the most important result of which is the ever-increasing beet root sugar crops on the Continent of Europe, and to a minor extent the heavy import duties on sugar in the United States, not only in Louisiana, where the sugar cane is cultivated, but also of beet root crops in the Western States. While statistics are continually printed in New York, Liverpool, and London showing the export of sugar from Brazil at varying estimates from 125,000 to 150,000 tons per annum, it may be useful to those interested to know that such figures have been entirely misleading for many years past, and that neither the United States nor Great Britain can count on any appreciable supplies from Brazil unless the production greatly increases, and that can only come about by some protection, whether by countervailing duties on bounty-fed sugars, or in any other form that may be devised by the cane-producing countries which have been so severely crippled by the keen competition of protected beet root. But in Pernambuco the climatic influences have also been at work, and due importance must be given to them, for it is well to bear in mind that, owing to the large consumption of sugar in Brazil, a small crop means very remunerative prices to the planters, and hardly comes into competition at all with the supply of sugar for the world's consumption.

The comments of the British Consuls here quoted are taken from a sufficiently wide geographical range for the purpose of showing the aspect of the sugar question from all points of view, and it will be gathered that bounty-fed sugars and countervailing duties are texts upon which the whole question hangs, and which now as much as ever, or even perhaps more so, requires a great deal of balancing.

EXPLANATION OF THE PLATES.

PLATE 1.

Sugar cane *(Saccharum officinarum)*. Fig. 1, Plant in flower; Fig. 2, Upper joint, showing leaves; Fig. 3, Portion of mature stem; Fig. 4, Portion of flower spike; Fig. 5, Separate flower.

PLATE 2.

Sugar cane plantation in Java, one month after planting.

PLATE 3.

Striped sugar canes in Natal.

PLATE 4.

Cutting sugar canes in Jamaica.

PLATE 5.

Figs. 1 to 6, Seedling sugar canes in various stages of growth; Fig. 7, Flower head, or "arrow," of sugar cane.

PLATE 6.

Natives manufacturing sugar at Katipo, East Tropical Africa. Fig. 1, Crushing the cane with native screw press; Fig. 2, Boiling the juice Fig. 3, Breaking the concrete sugar.

PLATE 7.

Beet root *(Beta maritima)*. Fig. 1, Field under cultivation; Fig. 2, General appearance of foliage; Fig. 3, "White Silesian Sugar Beet;" Fig. 4, "Vilmorin's Improved White Sugar Beet."

PLATE 8.

Sugar maple *(Acer saccharinum)*.

PLATE 9.

Collecting and preparing the juice of the sugar maple. Fig. 1, Collecting the juice; Fig. 2, Sugar house.

PLATE 10.

Fig. 1, Conducting the juice from the collecting barrels into the sugar house; Fig. 2, Boiling the juice at a primitive sugar camp; Fig. 3, "Stirring off;" Fig. 4, In the sugar house at night.

PLATE 11.

Fruiting spikes of varieties of the Sugar Sorghum, or Broom Corn *(Andropogon Sorghum*, var. *Saccharatus)*. Fig. 1, Goose neck; Fig. 2, Liberian; Fig. 3, Early amber cane; Fig. 4, Hybrid variety.

PLATE 12.

Native collecting the juice from the Date Sugar Palm of India *(Phœnix Sylvestris)*.

PLATE 13.

Gomuti. Ejoo Palm or Sugar Palm. Fig. 1, Tree in flower; Fig. 2, Fruits; Fig. 3, Portions of fruiting spadix.

PLATE 14.

Avenue of Palmyra palms *(Borassus flabellifer)*.

PLATE 15.

Implements used in collecting the juice or toddy from the Palmyra Palm. Fig. 1, Centre plank used for dividing the implement box into two compartments; Fig. 2, Case used by toddy collectors to contain their implements; Fig. 3, Basket made of Palmyra leaves for holding toddy; Fig. 4, Vessel used for attaching to the wounded spathe to collect the juice or toddy; Figs. 5 and 6, Shields or guards of thick leather to prevent the wearing of the rope by friction in climbing; Figs. 7, 8, and 9, Knives used for cutting the spadices; Fig. 10, Staff or bludgeon used for beating the spathes before cutting; Fig. 11, Rope used for passing round the body of the collector and the trunk of the tree to assist in climbing; Fig. 12, Loop of rope placed round the feet of the collector to facilitate climbing; Fig. 13, Wooden hook used for tightening climbing ropes.

ILLUSTRATIONS

OF

SUGAR, COMMERCIALLY AND BOTANICALLY CONSIDERED.

Plate 1.

Plate 2.

Plate 3.

Plate 4.

Plate 5.

Plate 6.

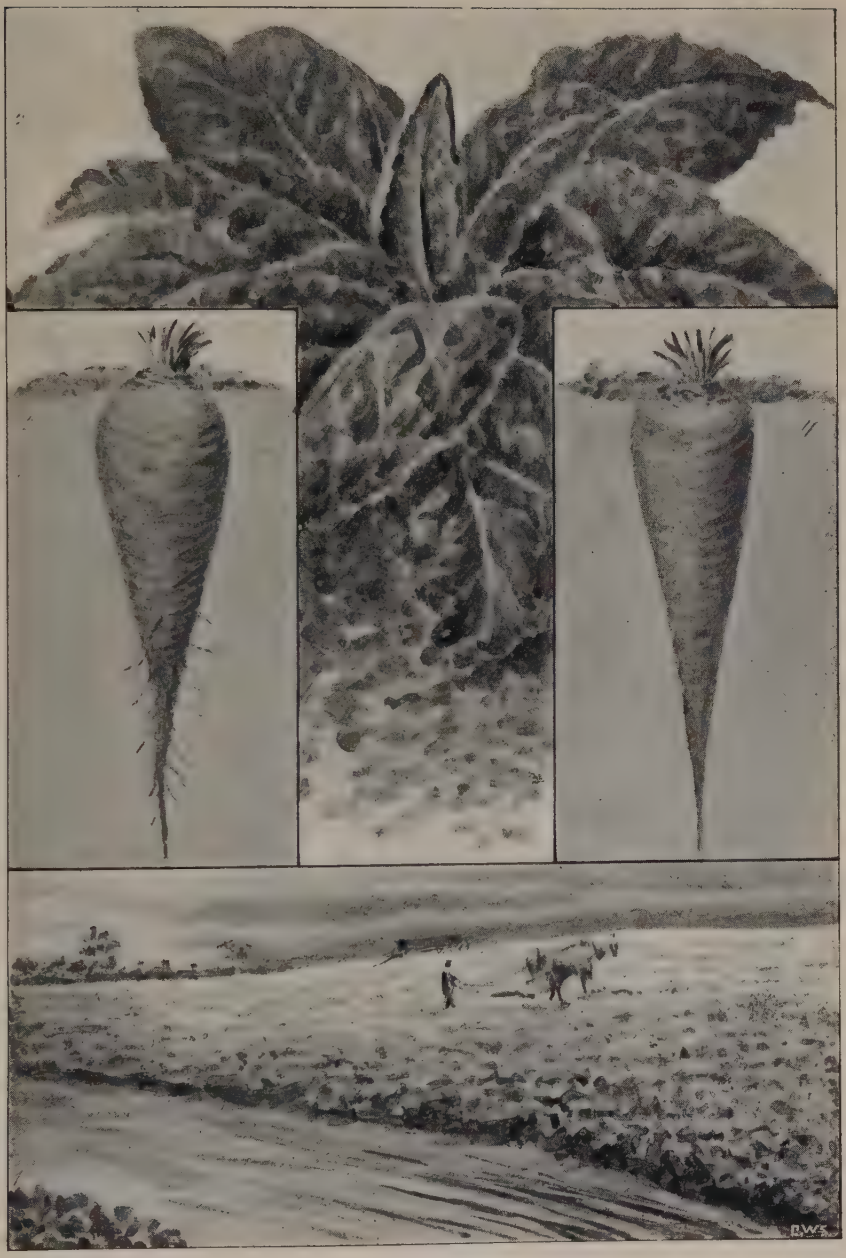

Plate 7.

Plate 8.

Plate 9.

Plate 10.

Plate 11.

Plate 12.

Plate 13.

Plate 14.

Plate 15.

The Roden Estate.

THROUGH the agency of the Co-operative Wholesale Society the thousands of Co-operators in the kingdom have aspired to become manufacturers of a wide range of necessaries and luxuries, and so well have these aspirations been fulfilled that to-day the men and women of the Co-operative world can be clothed and fed, to a great extent, by C.W.S. productions.

By the acquisition of the Roden Estate, however, our members attain to a position usually considered as vastly superior to the manufacturer, that of "landed gentry."

The circumstances of the case will certainly compel a great number of our friends to be "absentee landlords," and we, therefore, intend, by the aid of camera and pen, to compensate in some measure for their enforced absence.

The Land Question has occupied the attention of Co-operators for a considerable number of years. At the first Congress of the present series, held in London in 1869, Mr. E. T. Craig read a paper on "Land, Labour, and Capital," and Mr. T. Hare contributed one on "The Claims of Co-operative Societies to the Use of Public Land for Agricultural and Building Purposes."

Since that time the Congress has frequently discussed subjects bearing on this question, Sectional Conferences have dealt with it, and some Societies have attempted a practical solution, but so far the list of successes is lamentably small.

The Wholesale Society's "Annual" has also contained many valuable articles on aspects of this topic, the last appearing in the volume for 1899, written by Professor Long, his conclusions leading to a view by no means roseate.

The great importance of the Land Question, in its many various relations, must not be shelved indefinitely, and thoughtful men, recognising the land as the basis of our common existence, will not be content until the benefits Nature bestows with so lavish a hand are enjoyed alike by all her children.

For at least ten years prior to 1896 there existed a growing impression that Co-operative Agriculture might well engage the attention of the Wholesale Society. Resolutions to that effect have been considered on several occasions, and the Committee were constantly on the alert for some suitable property that would justify a recommendation to purchase.

THE RODEN ESTATE.

At the quarterly meetings held in June, 1896, the Committee announced that an estate of 741 acres of freehold and tithe-free land at Roden, in Shropshire, was for sale, and they strongly advised the delegates to authorise them to purchase.

After a short discussion the resolution was put and carried with scarcely a dissentient.

This is, in brief, an account of circumstances which led to the action of the C.W.S. referred to. Now for a word or two with regard to the actual estate and village of Roden, for the purchase was not merely of land, but also of houses and cottages, farms and other buildings which comprise the village, and last, but not least, the rural Hall.

It is worthy of remark that no public-house is to be seen within the precincts of our estate, nor, as a matter of fact, is there any church, but this may be looked upon as a significant coincidence, typical of the exclusion of religious differences from Co-operation.

On the roadside, about two miles before entering Roden, one's attention is arrested by a pile of ruins, beautiful even in decay. These ruins are the remains of Haughmond Abbey, erected about 1150 as a priory for Austin Canons by William Fitz-Alan. A fragment of the south-west portion of the church has been preserved. On its inner face there is a large round arch with nookshafts banded at mid-height above the cloister door, with the jambs of an arched window to the east of it. On the south side the actual round-headed procession doorway is of three orders, enriched with foliage and a truncated diamond ornament. Between the shafts are canopied figures of St. Peter and St. Paul, five feet high, probably additions of the 14th century. The nave formed (as was usual with this order) a parish church, and at the close of the 12th century one of the canons was empowered to act as Sacristan to minister sacraments to all the servants and members of the household, and to baptise infants and Jews. The patterns of twelve tiles forming the pavement have been preserved. They had red, chocolate, blue, or yellow for the ground, and various designs, some geometrical, some ornamented with foliage; one had concentric rings and rays like a web, and another was armorial with this charge, *or* a raven, and a third the mystic fish within an aureole.

After a six mile drive from Shrewsbury, when one alights, the first impression is of pervading peace. The place is so remote that even the sound of trains is unheard, and inquiries such as—Where are the shops, the school, and the church, are met by the same sententious reply, "Two miles."

The dwellings for the most part are of a quaint, old-fashioned, incommodious style, and serve much better as pictures than residences, but the farm houses present a more substantial appearance, excelled in their turn by the Hall itself. This is a modern building of fair dimensions, standing in extensive grounds, and surrounded by trees of many varieties and luxuriant growth. Spacious lawns and sequestered corners add to the charm of the surroundings. An excellent feature of the estate is the good condition of the roads. On the way to Roden one passes quarries from which stone is taken of a very hard nature, peculiarly adapted to good road making.

The main portion of the estate is still occupied by tenants working the farms; the remainder, about 61 acres, is under fruit cultivation. The ground is planted out according to the most approved methods, ensuring economy of space, with ample room for the development of the various crops.

From different points of view one sees lines of strawberry plants, raspberry canes, currant and gooseberry bushes, plum and damson trees planted with almost mathematical accuracy, converging into remote perspective.

The plum trees will bear fruit in about two or three years. The yield of the other fruits has been as follows for 1899:—Strawberries, about 19 tons; raspberries, 7 tons; black currants, 4½ tons; gooseberries, about ½ ton.

Catering was also done for the Pickling Department to the extent of 1½ tons onions, 6 tons red cabbage, and 4 tons cauliflower.

The photograph on Plate 2 was taken from the top of the water tower, and shows a portion of the land growing fruit. The hill in the background is the Wrekin, distant from Roden about eight miles. On Plate 3 may be seen the manager's residence, and on the right the water tower and engine-house. The well is in this building, and from it and the reservoir for rain water (which is 40ft. long, 26ft. wide, 10ft. deep) the water is pumped to the tank surmounting the tower, thus securing sufficient force to carry to the distance required.

The tomato culture has, so far, proved a brilliant success. Glass-houses have been erected upon the most modern principle, covering an acre of ground, and fitted with every appliance to induce Dame Nature to do her best. The view of the interior of one of the houses, each 100yds. long and 9yds. wide, will show how generously she has responded. Unfortunately, black and white can convey no idea of the vista of green and glowing red. The plants this season reach a height of eight or nine feet, the average weight borne being 3lb. per plant. A total of 28 tons had been despatched up to the end of September.

Plate 6 is a photograph taken of the plants growing in the open, covering about half an acre, and conveys a fair idea of the abundance of tomatoes; in fact, some of these plants, although only about 3ft. high, have produced as much as 5lb. on one plant, and about 5 tons have been gathered.

In Plate 7 we see a load of C.W.S. tomatoes, on the C.W.S. lurry with the C.W.S. horses and driver, ready for despatch to the railway station, all fruit being forwarded the same day as gathered.

At present the baskets are *not* C.W.S. manufacture, but as we have a river forming a boundary of the estate, and osier beds in the immediate vicinity, the entire loads may, in future, be C.W.S. also in that particular.

The fair and reasonable treatment of employés has been a distinguishing feature of the Wholesale Society, and the buildings shown on Plate 8 afford further evidence in this respect. These are cottages built for the accommodation of labourers on the estate, and consist of two rooms downstairs, one 12ft. 6in. by 13ft. 6in., the other 16ft. 4in. by 12ft. 6in. Upstairs there are three bedrooms. Outside, in a separate apartment, are the sink and water and copper for washing, and a shed for tools, wood, and coal, &c. The rent charged for these cottages is 2s. 6d. weekly, and the conveniences surpass those of many houses in our large towns at three times the rent. Each tenant has also a strip of land for his own private use. About thirty employés are engaged at Roden, but this number is materially increased during fruit-picking season, about fifty women and girls occupying their time in performing this labour.

In conclusion, we may say that this experiment in an agricultural direction by the Wholesale Society is being watched with great interest by those who recognise the importance of the Land Question. It is too soon to speak with absolute certainty of ultimate success, as advance has to be made with caution, but we are certain of the good wishes of all who desire to see cordial relations strengthened between land, labour, and capital.

ILLUSTRATIONS

OF

THE RODEN ESTATE.

PLATE 1.—BIRD'S-EYE VIEW OF RODEN FROM THE WATER TOWER.

Plate 2.– Portion of the Land under Fruit Cultivation (the Wrekin in Distance).

PLATE 3.—MANAGER'S HOUSE AND WATER TOWER.

PLATE 4.—EXTERIOR OF TOMATO GLASS-HOUSES.

PLATE 5.—INTERIOR OF TOMATO GLASS-HOUSE.

PLATE 6.—TOMATOES GROWING IN THE OPEN AIR.

PLATE 7.—OFF TO THE STATION.

PLATE 8.—LABOURERS' COTTAGES.

PLATE 9.—OLD THATCHED COTTAGE AT RODEN.

PLATE 10.—RODEN HALL.

PLATE 11.—RODEN HALL—A VIEW FROM THE HOUSE.

PLATE 12.—RODEN HALL—THE CROQUET LAWN.

PLATE 13.—A FARM-HOUSE AT RODEN.

PLATE 14.—HAUGHMOND ABBEY.

The Late Mr. John Adams.

The late Mr. John Adams.

THROUGH the death of Mr. John Adams, which took place on January 30th, 1899, the Co-operative movement in Scotland has lost a zealous worker and the Board of the Scottish Co-operative Wholesale Society a faithful and respected colleague. Mr. Adams was born at Glasgow on December 5th, 1856, and was thus little over forty-two years of age at his death. Though a comparatively young man, his record of service in the movement extended over a period of eighteen years, he having joined the Kinning Park Co-operative Society shortly after its institution in 1871. His business qualities were early recognised by his fellow-members, and he was elected to the Board of Directors, subsequently filling the office of Vice-President with much acceptance. He took a keen interest in the progress of the Society, and gave valuable assistance in organising and developing new departments. He was one of the originators of the *Kinning Park Co-operator*, which has since been absorbed in the *Scottish Co-operator*, and took especial interest in all educative and propagandist work. In November, 1890, he was returned as the Society's representative on the Board of the S.C.W.S., and retained that office until his death, being always re-elected at the quarterly meetings by large majorities. At the inception of the Govan Parish Council, in April, 1895, Mr. Adams was elected a representative of the Kinning Park Division, and held the seat until his death. He took an active part in this work, and the Council placed upon its records a generous appreciation of his services to the community, and conveyed to his widow their condolence with her in her bereavement.

While Mr. Adams could not be regarded as a striking personality, he had traits of character which earned the esteem and respect of all with whom he came in contact. In habit and temperament he was courteous and reserved; in all that he undertook he was painstaking to a degree, and, while not a forcible platform speaker, his contributions to debate were always informative and concise. His outstanding characteristic was his unsparing and conscientious discharge of duty, and though for some time before his death he had to struggle against great physical weakness he never flinched from taking his full share of the responsibility and worry which attached to his public duties. With a devotion which was ofttimes pathetic he held on bravely to the end, and may truly be said to have died in harness. The esteem in which he was held was evinced by the large company of colleagues and friends who followed him to his last resting-place.

The Late Mr. Thos. Swann.

The late Mr. Thos. Swann.

BY the death of Mr. Swann, on February 15th, 1899, another name is added to the list of those who have died in harness, as on the Friday prior to his decease he was present at a meeting of the Board of the Co-operative Wholesale Society. Mr. Swann's official connection with the Wholesale Society commenced in 1882. For fourteen years he was Chairman of the Shipping Committee, and for thirteen years he occupied the post of General Secretary to the Board.

He was a prominent figure in the public life of Masborough, his native town. For twenty-two years he was Clerk to the Rotherham School Board, and was also a member of the Masborough Burial Board.

Mr. Swann was also elected in 1887 on the Board of the Co-operative Newspaper Society, and retained that position up to the time of his death.

In 1872 he was appointed Treasurer to the Masborough Co-operative Society, and only a fortnight before his decease was re-elected unopposed.

The record of Mr. Swann's life is one of unpretending worth, spent in conscientious service of his fellows.

CO-OPERATIVE SOCIETIES IN THE UNITED KINGDOM.

STATISTICS SHOWING THE POSITION AND PROGRESS OF THE CO-OPERATIVE MOVEMENT FROM 1862 TO 1897.

THESE tables have been brought up to date on the basis of the Annual Returns by Societies to the Registrar of Friendly Societies, and corrected by the more recent returns to the Co-operative Union.

The tables refer to the United Kingdom, England and Wales, Scotland, and Ireland, and give the comparison between the figures of 1897 and those of ten years ago. We have also inserted below the figures relating to profits devoted to Education.

CO-OPERATION IN THE UNITED KINGDOM DURING 1887 AND 1897.

	1887.		1897.		INCREASE PER CENT.
Societies (making returns) ..No.	1,516	..	2,065	..	36
Members.....No.	967,828	..	1,627,135	..	68
Capital (share and loan) .....£	12,597,792	..	28,647,084	..	127
Sales .....£	34,483,771	..	64,956,049	..	88
Profits.....£	3,190,309	..	6,535,861	..	104
Profits devoted to Education..£	21,380	..	50,302	..	135

CO-OPERATION IN ENGLAND AND WALES DURING 1887 AND 1897.

	1887.		1897.		INCREASE PER CENT.
Societies (making returns) ..No.	1,170	..	1,573	..	34
Members.....No.	813,537	..	1,336,985	..	64
Capital (share and loan) .....£	10,867,842	..	23,223,600	..	113
Sales .....£	28,221,988	..	50,693,526	..	79
Profits.....£	2,542,884	..	4,989,589	..	96
Profits devoted to Education..£	19,707	..	42,791	..	117

CO-OPERATION IN SCOTLAND DURING 1887 AND 1897.

	1887.		1897.		INCREASE PER CENT.
Societies (making returns) ..No.	334	..	357	..	7
Members.....No.	152,866	..	276,053	..	80
Capital (share and loan) .....£	1,717,899	..	5,323,923	..	209
Sales .....£	6,215,891	..	13,669,417	..	120
Profits.....£	645,018	..	1,539,547	..	138
Profits devoted to Education..£	1,673	..	7,508	..	348

CO-OPERATION IN IRELAND DURING 1887 AND 1897.

	1887.		1897.
Societies (making returns) .....No.	12	..	135
Members.....No.	1,425	..	14,097
Capital (share and loan) .....£	12,051	..	99,561
Sales .....£	45,892	..	593,106
Profits.....£	2,407	..	6,725
Profits devoted to Education.....£	..	..	3

CO-OPERATIVE SOCIETIES,

TABLE (1).—General Summary *of* Returns

(Compiled from Official

Year.	No. of Societies			Number of Members.	Capital at End of Year.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.		Share.	Loan.		
					£	£	£	£
1862	*a*454	*f*68	332	90,341	428,376	54,499	2,333,523	165,562
1863	51	73	381	111,163	579,902	76,738	2,673,778	216,005
1864	146	110	394	*b*129,429	684,182	89,122	2,836,606	224,460
1865	101	182	403	*b*124,659	819,367	107,263	3,373,847	279,226
1866	163	240	441	*b*144,072	1,046,310	118,023	4,462,676	372,307
1867	137	192	577	171,897	1,475,199	136,734	6,001,153	398,578
1868	190	93	673	211,781	1,711,643	177,706	7,122,360	424,420
1869	65	133	754	229,861	1,816,672	179,054	7,353,363	438,101
1870	67	153	748	248,108	2,035,626	197,029	8,201,685	553,435
1871	56	235	746	262,188	2,305,951	215,453	9,463,771	666,399
1872	141	113	935	330,550	2,969,573	371,541	13,012,120	936,715
1873	226	138	983	387,765	3,581,405	496,830	15,639,714	1,110,658
1874	130	232	1,031	412,733	3,905,093	587,342	16,374,053	1,228,038
1875	117	285	1,170	480,076	4,403,547	849,990	18,499,901	1,429,090
1876	82	177	1,167	508,067	5,141,390	919,772	19,921,054	1,743,980
1877	67	246	1,148	529,081	5,445,449	1,073,275	21,390,447	1,924,551
1878	52	121	1,185	560,993	5,647,443	1,145,717	21,402,219	1,837,660
1879	52	146	1,151	572,621	5,755,522	1,496,343	20,382,772	1,857,790
1880	69	100	1,183	604,063	6,232,093	1,341,290	23,248,314	*c*1,868,599
1881	66	..	1,240	643,617	6,940,173	1,483,583	24,945,063	1,981,109
1882	67	115	1,288	687,158	7,591,241	1,622,431	27,541,212	2,155,398
1883	55	170	1,291	729,957	7,921,356	1,577,086	29,336,028	2,434,996
1884	78	63	1,400	797,950	8,646,188	1,830,836	30,424,101	2,723,794
1885	84	50	1,441	850,659	9,211,259	1,945,834	31,305,910	2,988,690
1886	83	65	1,486	894,488	9,747,452	2,160,090	32,730,745	3,070,111
1887	87	145	1,516	967,828	10,344,216	2,253,576	34,483,771	3,190,309
1888	100	140	1,592	1,011,258	10,946,219	2,452,887	37,793,903	3,454,974
1889	193	123	1,621	1,071,089	11,687,912	2,923,711	40,674,673	3,734,546
1890	122	159	1,647	1,140,573	12,783,629	3,169,155	43,731,669	4,275,617
1891	117	122	1,684	1,207,511	13,847,705	3,393,394	49,024,171	4,718,532
1892	127	24	1,791	1,284,843	14,647,707	3,773,616	51,060,854	4,743,352
1893	106	59	1,825	1,340,318	15,318,665	3,874,954	51,803,836	4,610,657
1894	113	61	1,930	1,373,004	15,756,064	4,064,681	52,110,800	4,928,838
1895	123	113	1,966	1,430,340	16,749,826	4,581,573	55,100,249	5,389,071
1896	128	134	2,010	1,534,824	18,236,040	4,786,331	59,951,635	5,990,023
1897	126	165	2,065	1,627,135	19,510,007	*h*9,137,077	64,956,049	6,535,861
						Totals ..	£940,668,025	£84,601,452

a The Total Number Registered to the end of 1862. *b* Reduced by 18,278 for 1864, 23,927 for 1865, and were included in the returns from the Retail Societies. *c* Estimated on the basis of the returns made to sum to be Investments other than in Trade. *f* Estimated. *g* Investments and other Assets. *h* Loans

UNITED KINGDOM.

for each Year, from 1862 to 1897 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	Capital Invested in: Industrial and Provident Societies, and other than Trade.	Capital Invested in: Joint-stock Companies.	Profit Devoted to Education.	Amount of Reserve Fund.	Year.
£	£	£	£	£	£	
127,749	....	....	....	....	....	1862
167,620	....	....	....	....	....	1863
163,147	....	....	....	....	....	1864
181,766	....	....	....	....	....	1865
219,746	....	....	....	....	....	1866
255,923	583,539	*d*494,429	....	3,203	32,629	1867
294,451	671,165	137,397	166,398	3,636	33,109	1868
280,116	784,847	117,586	178,367	3,814	38,630	1869
311,910	912,102	126,736	204,876	4,275	52,990	1870
346,415	1,029,446	145,004	262,594	5,097	66,631	1871
479,130	1,383,063	318,477	382,846	6,696	93,601	1872
556,540	1,627,402	370,402	449,039	7,107	102,722	1873
594,455	1,781,053	418,301	522,081	7,949	116,829	1874
686,178	2,095,675	667,825	553,454	10,879	241,930	1875
1,279,856	2,664,042	....	....	....	....	1876
1,381,961	2,648,282	....	....	....	....	1877
1,494,607	2,609,729	....	....	....	....	1878
1,537,138	2,857,214	....	....	....	....	1879
1,429,160	2,880,076	*e*3,447,347	....	13,910	....	1880
....	3,053,333	....	....	13,825	....	1881
1,690,107	3,452,942	*e*4,281,264	....	14,778	..	1882
1,826,804	3,709,555	*e*4,497,718	....	16,788	....	1883
1,936,485	3,575,836	*e*4,550,890	....	19,154	....	1884
2,082,539	3,729,492	*e*5,433,120	....	20,712	....	1885
1,800,347	4,072,765	*e*3,858,940	....	19,878	....	1886
1,960,374	4,360,836	*e*4,491,483	....	21,380	....	1887
2,045,391	4,556,593	*e*5,233,859	....	24,245	....	1888
2,182,775	4,795,132	*e*5,833,278	....	25,455	....	1889
2,361,319	5,141,750	*e*6,958,787	....	27,587	....	1890
2,621,091	5,838,370	*e*6,394,867	....	30,087	....	1891
2,902,994	6,175,287	*e*6,952,906	....	32,753	....	1892
3,181,818	6,314,715	*e*7,089,689	....	32,677	....	1893
3,267,288	5,905,442	*e*7,174,736	....	36,553	....	1894
3,478,036	6,333,102	*e*7,880,602	....	41,491	....	1895
3,786,063	6,844,018	*g*13,929,329	....	46,895	....	1896
*j*3,074,420	7,602,211	*g*14,278,094	....	50,302	....	1897

30,921 for 1866, being the number of "Individual Members" returned by the Wholesale Society, and which the Central Co-operative Board for 1881. *d* Includes Joint-stock Companies. *e* The return states this and other Creditors. *j* Exclusive of Share Interest.

CO-OPERATIVE SOCIETIES,

TABLE (2).—General Summary *of* Returns

(Compiled from Official

Year.	No. of Societies			Number of Members.	Capital at End of Year.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.		Share.	Loan.		
					£	£	£	£
1862	*a*454	*f*68	332	90,341	428,376	54,499	2,333,523	165,562
1863	51	73	381	111,163	579,902	76,738	2,673,778	216,005
1864	146	110	394	*b*129,429	684,182	89,122	2,836,606	224,460
1865	101	182	403	*b*124,659	819,367	107,263	3,373,847	279,226
1866	163	240	441	*b*144,072	1,046,310	118,023	4,462,676	372,307
1867	137	192	577	171,897	1,475,199	136,734	6,001,153	398,578
1868	190	93	673	211,781	1,711,643	177,706	7,122,360	424,420
1869	65	133	754	229,861	1,816,672	179,054	7,353,363	438,101
1870	67	153	748	248,108	2,035,626	197,029	8,201,685	553,435
1871	56	235	746	262,188	2,305,951	215,453	9,463,771	666,399
1872	138	104	927	339,986	2,968,758	371,531	12,992,345	935,551
1873	225	135	978	387,301	3,579,962	496,740	15,623,553	1,109,795
1874	128	227	1,026	412,252	3,903,608	586,972	16,358,278	1,227,226
1875	116	283	1,163	479,284	4,793,909	844,620	18,484,382	1,427,365
1876	82	170	1,165	507,857	5,140,219	919,762	19,909,699	1,742,501
1877	66	240	1,144	528,576	5,437,959	1,073,265	21,374,013	1,922,361
1878	52	119	1,181	560,703	5,645,883	1,145,707	21,385,646	1,836,371
1879	51	146	1,145	573,084	5,747,907	1,496,143	20,365,602	1,856,308
1880	67	100	1,177	603,541	6,224,271	1,341,190	23,231,677	*c*1,866,839
1881	62	..	1,230	642,783	6,937,284	1,483,583	24,926,005	1,979,576
1882	66	113	1,276	685,981	7,581,739	1,622,253	27.509,055	2,153,699
1883	55	165	1,282	728,905	7,912,216	1,576,845	29,303,441	2,432,621
1884	76	57	1,391	896,845	8,636,960	1,830,624	30,392,112	2,722,103
1885	84	47	1,431	849,616	9,202,138	1,945,508	31,273,156	2,986,155
1886	82	62	1,474	893,153	9,738,278	2,159,746	32,684,244	3,067,436
1887	84	140	1,504	966,403	10,333,069	2,252,672	34,437,879	3,187,902
1888	100	130	1,579	1,009,773	10,935,031	2,452,158	37,742,429	3,451,577
1889	89	118	1,608	1,069,396	11,677,286	2,923,506	40,618,060	3,731,966
1890	110	151	1,631	1,138,780	12,776,733	3,168,788	43,667,363	4,273,010
1891	95	108	1,656	1,205,244	13,832,158	3,390,076	48,921,697	4,714,298
1892	118	14	1,753	1,282,103	14,627,570	3,766,737	50,902,681	4,739,771
1893	98	42	1,784	1,336,731	15,297,470	3,867,305	51,577,727	4,606,811
1894	101	43	1,880	1,368,944	15,732,061	4,054,172	51,846,349	4,923,027
1895	78	70	1,895	1,423,632	16,726,623	4,570,116	54,758,400	5,382,862
1896	92	87	1,908	1,525,283	18,197,828	4,766,244	59,461,852	5,983,655
1897	73	99	1,930	1,613,038	19,466,155	*h*9,081,368	64,362,943	6,529,136
						Totals ..	£937,933,350	£84,528,415

a The Total Number Registered to the end of 1862. *b* Reduced by 18,278 for 1864, 23,927 for 1865, and were included in the returns from the Retail Societies. *c* Estimated on the basis of the returns made to sum to be Investments other than in Trade. *f* Estimated. *g* Investments and other Assets. *h* Loans

GREAT BRITAIN.

for each Year, from 1862 to 1897 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	Capital Invested in: Industrial and Provident Societies, and other than Trade.	Capital Invested in: Joint-stock Companies.	Profit Devoted to Education.	Amount of Reserve Fund.	Year.
£	£	£	£	£	£	
127,749	....	....	....	....	....	1862
167,620	....	....	....	....	....	1863
163,147	....	....	....	....	....	1864
181,766	....	....	....	....	....	1865
219,746	....	....	....	....	....	1866
255,923	583,539	*d*494,429	....	3,203	32,629	1867
294,451	671,165	137,397	166,398	3,636	33,109	1868
280,116	784,847	117,586	178,367	3,814	38,630	1869
311,910	912,102	126,736	204,876	4,275	52,990	1870
346,415	1,029,446	145,004	262,594	5,097	66,631	1871
477,846	1,383,063	318,477	382,846	6,696	93,601	1872
555,766	1,627,402	370,402	449,039	7,107	102,722	1873
593,548	1,781,053	418,301	522,081	7,949	116,829	1874
685,118	2,094,325	667,825	553,454	10,879	241,930	1875
1,279,392	2,664,042	....	....	....	....	1876
1,381,285	2,647,309	....	....	....	....	1877
1,493,842	2,609,729	....	....	....	....	1878
1,536,282	2,857,214	....	....	....	....	1879
1,428,303	2,878,832	*e*3,429,935	17,407	13,910	....	1880
....	3,051,665	....	....	13,822	....	1881
1,689,823	3,450,481	*e*4,281,243	....	14,778	....	1882
1,818,880	3,706,978	*e*4,490,477	....	16,788	....	1883
1,933,297	3,572,226	*e*4,543,388	....	19,154	....	1884
2,080,427	3,726,756	*e*5,425,319	....	20,712	....	1885
1,797,696	4,068,831	*e*3,858,451	....	19,878	....	1886
1,957,873	4,354,857	*e*4,490,674	....	21,380	....	1887
2,041,566	4,550,743	*e*5,233,349	....	24,238	....	1888
2,178,961	4,789,170	*e*5,832,435	....	25,455	....	1889
2,357,647	5,136,580	*e*6,958,131	....	27,587	....	1890
2,617,200	5,832,573	*e*6,390,827	....	30,087	....	1891
2,897,117	6,168,947	*e*6,946,321	....	32,753	....	1892
3,174,460	6,309,624	*e*7,076,071	....	32,677	....	1893
3,256,156	5,898,804	*e*7,169,710	....	36,553	....	1894
3,465,905	6,323,781	*e*7,876,837	....	41,491	....	1895
3,767,651	6,828,943	*g*13,895,043	....	46,895	....	1896
*j*3,061,934	7,582,623	*g*14,246,571	....	50,299	....	1897

30,921 for 1863, being the number of "Individual Members" returned by the Wholesale Society, and which the Central Co-operative Board for 1881. *d* Includes Joint-stock Companies. *e* The return states this and other Creditors. *j* Exclusive of Share Interest.

CO-OPERATIVE SOCIETIES,

TABLE (3).—General Summary *of* Returns

(Compiled from Official

Year.	No. of Societies			Number of Members.	Capital at End of Year.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.		Share.	Loan.		
					£	£	£	£
1862	454	68	332	90,341	428,376	54,499	2,333,523	165,562
1863	51	73	381	111,163	579,902	76,738	2,673,778	216,005
1864	146	110	394	129,429	684,182	89,122	2,836,606	224,460
1865	101	182	403	124,659	819,367	107,263	3,373,847	279,226
1866	163	240	441	144,072	1,046,310	118,023	4,462,676	372,307
1867	137	192	577	171,897	1,475,199	136,734	6,001,153	398,578
1868	190	93	673	211,781	1,711,643	177,706	7,122,360	424,420
1869	65	133	754	229,861	1,816,672	179,054	7,353,363	438,101
1870	67	153	748	248,108	2,035,626	197,029	8,201,685	553,435
1871	56	235	746	262,188	2,305,951	215,453	9,463,771	666,399
1872	113	66	749	301,157	2,786,965	344,509	11,397,225	809,237
1873	186	69	790	340,930	3,344,104	431,808	13,651,127	959,493
1874	113	177	810	357,821	3,653,582	498,052	14,295,762	1,072,139
1875	98	237	926	420,024	4,470,857	742,073	16,206,570	1,250,570
1876	72	113	937	444,547	4,825,642	774,809	17,619,247	1,541,384
1877	58	186	896	461,666	5,092,958	916,955	18,697,788	1,680,370
1878	48	65	963	490,584	5,264,855	965,499	18,719,081	1,583,925
1879	40	106	937	504,117	5,374,179	1,324,970	17,816,037	1,598,156
1880	53	62	953	526,686	5,806,545	1,124,795	20,129,217	1,600,000
1881	50	..	971	552,353	6,431,553	1,205,145	21,276,850	1,657,564
1882	51	82	1,012	593,262	7,058,025	1,293,595	23,607,809	1,814,375
1883	42	158	990	622,871	7,281,448	1,203,764	24,776,980	2,036,826
1884	64	48	1,079	672,780	7,879,686	1,359,007	25,600,250	2,237,210
1885	73	47	1,114	717,019	8,364,367	1,408,941	25,858,065	2,419,615
1886	67	61	1,141	751,117	8,793,068	1,551,989	26,747,174	2,476,651
1887	73	139	1,170	813,537	9,269,422	1,598,420	28,221,988	2,542,884
1888	94	125	1,244	850,020	9,793,852	1,743,890	30,350,048	2,766,131
1889	81	112	1,268	897,841	10,424,169	2,098,100	33,016,341	2,981,543
1890	103	149	1,290	955,393	11,380,210	2,196,364	35,367,102	3,393,991
1891	88	108	1,313	1,008,448	12,253,427	2,260,686	39,617,376	3,781,254
1892	106	12	1,404	1,073,739	12,848,024	2,487,499	40,827,931	3,701,402
1893	92	40	1,432	1,119,210	13,400,837	2,453,723	41,483,346	3,592,856
1894	96	41	1,525	1,139,535	13,668,938	2,520,779	41,731,223	3,841,723
1895	68	69	1,530	1,191,766	14,511,314	2,803,917	44,003,888	4,194,876
1896	88	84	1,554	1,264,763	15,620,803	2,952,740	47,331,384	4,569,782
1897	68	98	1,573	1,336,985	16,654,107	*a*6,569,493	50,693,526	4,989,589
						Totals ..	£782,866,097	£68,832,039

a Loans and other Creditors.

ENGLAND AND WALES.

for each Year, from 1862 to 1897 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	Capital Invested in: Industrial and Provident Societies, and other than Trade.	Capital Invested in: Joint-stock Companies.	Profit Devoted to Education.	Amount of Reserve Fund.	Year.
£	£	£	£	£	£	
127,749	....	....	....	....	....	1862
167,620	....	....	....	....	....	1863
163,147	....	....	....	....	....	1864
181,766	....	....	....	....	....	1865
219,746	....	....	....	....	....	1866
255,923	583,539	494,429	....	3,203	32,629	1867
294,451	671,165	137,397	166,398	3,636	33,109	1868
280,116	784,847	117,586	178,367	3,814	38,630	1869
311,910	912,102	126,736	204,876	4,275	52,990	1870
346,415	1,029,446	145,004	262,594	5,097	66,631	1871
419,567	1,219,092	300,712	380,043	6,461	79,292	1872
488,464	1,439,137	337,811	443,724	6,864	83,149	1873
517,445	1,572,264	386,640	510,057	7,486	98,732	1874
598,080	1,852,437	636,400	538,140	10,454	220,011	1875
1,137,053	2,377,380	....	....	....	....	1876
1,222,664	2,310,041	....	....	....	....	1877
1,315,364	2,286,795	....	....	....	....	1878
1,353,832	2,486,704	....	....	....	....	1879
1,285,875	2,512,039	†3,226,370	....	13,262	....	1880
....	2,585,443	....	....	13,314	....	1881
1,499,633	2,969,957	†3,919,455	....	14,070	....	1882
1,606,424	3,160,569	†4,113,995	....	15,903	....	1883
1,684,070	2,932,817	†4,118,751	....	18,062	....	1884
1,825,717	3,044,534	†4,811,819	....	19,374	....	1885
1,525,194	3,323,450	†3,475,319	....	18,440	....	1886
1,670,290	3,512,626	†4,112,807	....	19,707	....	1887
1,743,838	3,687,394	†4,868,141	....	22,391	....	1888
1,849,811	3,856,498	†5,386,444	....	23,388	....	1889
1,996,438	4,121,400	†6,407,701	....	24,919	....	1890
2,207,143	4,691,801	†5,749,811	....	27,196	....	1891
2,420,270	4,947,231	†6,154,426	....	29,105	....	1892
2,645,989	5,032,623	†6,234,093	....	29,151	....	1893
2,687,388	4,763,953	†6,054,847	....	32,503	....	1894
2,881,742	5,108,794	†6,625,724	....	36,433	....	1895
3,097,516	5,535,227	‡11,303,924	....	40,269	....	1896
*b*2,469,953	6,068,803	‡11,670,057	....	42,791	....	1897

b Exclusive of Share Interest. † Investments other than in Trade. ‡ Investments and other Assets.

CO-OPERATIVE

TABLE (4).—General Summary *of* Returns

(Compiled from Official

Year.	Number of Societies			Number of Members.	Capital at End of Year.	
	Registered.	Not Making Returns.	Making Returns.		Share.	Loan.
					£	£
1872	25	38	178	38,829	181,793	27,022
1873	39	66	188	46,371	235,858	64,932
1874	15	50	216	54,431	250,026	88,920
1875	18	46	237	59,260	323,052	102,547
1876	10	57	228	63,310	314,577	144,953
1877	8	54	248	66,910	345,001	156,310
1878	4	54	218	70,119	381,028	180,208
1879	11	*40	208	68,967	373,728	171,173
1880	14	38	224	76,855	417,726	216,395
1881	12	9	259	90,430	505,731	278,438
1882	15	31	264	92,719	523,714	328,658
1883	13	7	292	106,034	630,768	373,081
1884	12	9	312	124,065	757,274	471,617
1885	11	..	317	132,597	837,771	536,567
1886	15	1	333	142,036	945,210	607,757
1887	11	1	334	152,866	1,063,647	654,252
1888	5	5	335	159,753	1,141,179	708,268
1889	8	6	340	171,555	1,253,117	825,406
1890	7	2	341	183,387	1,396,523	972,424
1891	7	..	343	196,796	1,578,731	1,129,390
1892	12	2	349	208,364	1,779,546	1,279,238
1893	6	2	352	217,521	1,896,633	1,413,582
1894	5	2	355	229,409	2,063,123	1,533,393
1895	10	1	365	231,866	2,215,309	1,766,199
1896	4	3	354	260,520	2,577,025	1,813,504
1897	5	1	357	276,053	2,812,048	*a*2,511,875
						Totals..£

* Not stated, but estimated at about 40. *a* Loans and other Creditors.

SOCIETIES, SCOTLAND.

for each Year, from 1872 to 1897 inclusive.

Sources, and Corrected.)

Sales.	Net Profit.	Trade Expenses.	Trade Stock.	Capital Invested in		Profit Devoted to Education.	Amount of Reserve Fund.	Year.
				Industrial and Provident Societies, and other than Trade.	Joint-stock Companies.			
£	£	£	£	£	£	£	£	
1,595,120	126,314	58,279	163,971	17,765	2,803	235	14,309	1872
1,972,426	150,302	67,302	188,265	32,591	5,315	243	19,573	1873
2,062,516	155,087	76,103	208,789	31,661	12,024	463	18,097	1874
2,277,812	176,795	87,038	241,888	31,425	15,314	425	21,919	1875
2,290,452	201,117	142,339	286,662	..	..	..	..	1876
2,676,225	241,991	158,621	337,268	..	..	..	..	1877
2,666,565	252,446	178,478	322,934	..	..	..	..	1878
2,549,565	258,152	182,450	370,510	..	..	..	..	1879
3,102,460	266,839	142,428	366,793	203,565	17,407	648	..	1880
3,649,155	322,012	..	466,222	..	..	508	..	1881
3,901,246	339,324	190,190	480,524	†361,788	..	708	..	1882
4,526,461	395,795	212,456	546,409	†376,482	..	885	..	1883
4,791,862	484,893	249,227	639,409	†424,637	..	1,092	..	1884
5,415,091	566,540	254,710	682,222	†613,500	..	1,338	..	1885
5,937,070	590,785	272,502	745,381	†383,132	..	1,438	..	1886
6,215,891	645,018	287,583	842,231	†377,867	..	1,673	..	1887
7,392,381	685,446	297,728	863,349	†365,208	..	1,847	..	1888
7,601,719	750,423	329,150	932,672	†445,991	..	2,067	..	1889
8,300,261	879,019	361,209	1,015,180	†550,430	..	2,668	..	1890
9,304,321	933,044	410,057	1,140,772	†641,016	..	2,891	..	1891
10,074,750	1,038,369	476,847	1,221,716	†791,895	..	3,648	..	1892
10,094,381	1,013,955	528,471	1,277,001	†841,978	..	3,526	..	1893
10,115,126	1,081,304	568,768	1,134,851	†1,114,863	..	4,050	..	1894
10,754,512	1,187,986	584,163	1,214,987	†1,251,063	..	5,058	..	1895
12,130,468	1,413,873	670,135	1,293,716	‡2,591,119	..	6,626	..	1896
13,669,417	1,539,547	*b*591,981	1,513,820	‡2,576,514	..	7,508	..	1897
155,067,253	15,696,376							

b Exclusive of Share Interest. † Investments other than in Trade. ‡ Investments and other Assets.

CO-OPERATIVE SOCIETIES, IRELAND.

TABLE (5).—GENERAL SUMMARY *of* RETURNS *for each Year, from 1873 to 1897 inclusive.*

(Compiled from Official Sources, and Corrected.)

YEAR.	NUMBER OF SOCIETIES			Number of Members.	CAPITAL AT END OF YEAR.		Sales.	Net Profit.	Trade Expenses.	Trade Stock.	CAPITAL		Profit Devoted to Education.	Amount of Reserve Fund.
	Registered.	Not Making Returns.	Making Returns.		Share.	Loan.					Invested in Industrial and Prov. Societies.	Invested in Joint-stock Companies.		
					£	£	£	£	£	£	£	£	£	£
1873	1	3	5	464	1,443	90	16,161	863	774	..	..	..	..	..
1874	2	5	5	481	1,485	370	15,775	812	907	..	..	..	..	..
1875	1	2	7	792	9,638	5,370	15,519	1,725	1,060	1,350	..	..	..	67
1876	..	7	2	210	1,171	10	11,355	1,479	464	..	..	..	..	..
1877	1	6	4	505	7,490	10	16,434	2,190	676	973	..	..	..	..
1878	..	2	4	290	1,560	10	16,573	1,289	765	..	..	..	..	15
1879	1	..	6	537	7,615	200	17,170	1,482	856	..	..	..	45	71
1880	2	..	6	522	7,822	100	16,637	1,760	857	1,244	5	..	..	..
1881	4	..	10	834	2,889	..	19,058	1,533	1,039	1,668	8	..	3	..
1882	1	2	12	1,177	9,502	178	32,157	1,699	2,284	2,461	*21	..	..	..
1883	..	5	9	1,052	9,140	241	32,587	2,375	1,924	2,577	*7,241	..	..	..
1884	2	6	9	1,105	9,228	212	31,989	1,691	3,188	3,610	*7,502	..	..	..
1885	..	3	10	1,043	9,121	326	32,754	2,535	2,112	2,736	*7,801	..	..	..
1886	1	3	12	1,335	9,174	344	46,501	2,675	2,651	3,934	..	..	..	..
1887	3	5	12	1,425	11,147	904	45,892	2,407	2,501	5,979	*809	..	..	..
1888	1	10	13	1,485	11,188	729	51,474	3,397	3,825	5,850	*510	..	7	..
1889	4	5	13	1,693	10,626	205	56,613	2,580	3,814	5,962	*843	..	..	..
1890	12	8	16	1,793	6,896	367	64,306	2,607	3,672	5,170	*656	..	..	..
1891	22	14	28	2,267	15,547	3,318	102,474	4,234	3,891	5,797	*4,040	..	..	..
1892	9	10	38	2,740	20,137	6,879	158,173	3,581	5,877	6,340	*6,585	..	..	..
1893	8	17	41	3,587	21,195	7,649	226,109	3,846	7,358	5,091	*13,618	..	..	..
1894	12	18	50	4,060	24,003	10,509	264,451	5,811	11,132	6,638	*5,026	..	..	..
1895	45	43	71	6,708	23,203	11,457	341,849	6,209	12,131	9,321	*3,765	..	..	..
1896	36	47	102	9,541	38,212	20,087	489,783	6,368	18,412	15,075	†34,286	..	..	..
1897	53	66	135	14,097	43,852	*a*55,709	593,106	6,725	*b*12,486	19,588	†31,523	..	3	..
						Totals..	£ 2,734,675	73,037						

a Loans and other Creditors. *b* Exclusive of Share Interest. * Investments other than in Trade. † Investments and other Assets.

CO-OPERATIVE SOCIETIES IN ENGLAND AND WALES

WITH AN

ANNUAL TRADE IN 1898 OF OVER £200,000.

(See Table 6, pages 440–41.)

THE number of societies under this head is thirty-six, of which fourteen are in Lancashire, ten in Yorkshire, six in Durham, and one each in Derbyshire, Cheshire, Devonshire, Northumberland, Leicestershire, and Kent.

The combined sales of these thirty-six societies amount to £24,823,804, being 49 per cent of the entire sales of societies in England and Wales. The Wholesale Society comes first with a business of £12,574,748, followed by Leeds Society and Corn Mill, with sales amounting to £1,250,451; next come Bolton, Barnsley British, Newcastle-on-Tyne, Sowerby Bridge Corn Mill, Oldham Industrial, Pendleton, Bradford, Bishop Auckland, Burnley, Gateshead, Plymouth, Huddersfield, Halifax, Derby, Halifax Corn Mill, Bury, Leigh, and Oldham Equitable, all of whose sales considerably exceed £300,000. The sales of the remaining sixteen societies are under that sum.

CO-OPERATIVE SOCIETIES IN ENGLAND AND WALES

WITH AN

ANNUAL TRADE OF BETWEEN £100,000 & £200,000.

(See Table 7, pages 442–43.)

Of the forty-eight societies coming under this head for 1898, Lancashire furnishes twelve, Yorkshire twelve, Durham ten, Cumberland two, Cheshire two, Essex two, Derbyshire, Lincolnshire, Glamorganshire, Northumberland, Northamptonshire, Gloucestershire, Middlesex, and Norfolk one each. Their total sales are £6,946,656, or 13 per cent of the total sales of societies in England and Wales.

CO-OPERATIVE SOCIETIES,

Bird's-eye View

TABLE (6) showing the Sales of all Societies which,

No.	Names of Societies.	Counties.	1879.	1880.	1881.
			£	£	£
1	Rochdale Equitable Pioneers	Lancashire	270,070	283,655	272,141
2	Rochdale Co-operative Corn Mill	Lancashire	270,337	301,836	299,672
3	Co-operative Wholesale Society	Lancashire	2,645,331	3,339,681	3,574,095
4	Sowerby Bridge Corn Mill	Yorkshire	447,301	565,194	589,929
5	Halifax Industrial	Yorkshire	....	207,539	....
6	Leeds Industrial and Corn Mill	Yorkshire	360,017	412,225	432,811
7	Oldham Industrial	Lancashire	261,813	303,012	310,387
8	Bury District	Lancashire	217,282	231,918	225,689
9	Halifax Corn Mill	Yorkshire	....	....	....
10	Manchester Equitable	Lancashire	208,513	242,966	242,535
11	Bolton	Lancashire	....	....	219,657
12	Gateshead	Durham	....	....	200,261
13	Barnsley British	Yorkshire	....	....	....
14	Oldham Equitable	Lancashire	....	....	....
15	Huddersfield	Yorkshire	....	....	....
16	Newcastle-on-Tyne	Northumberland	....	....	....
17	Accrington and Church	Lancashire	....	....	....
18	Bishop Auckland	Durham	....	....	....
19	Brighouse	Yorkshire	....	....	....
20	Bradford	Yorkshire	....	....	....
21	Pendleton	Lancashire	....	....	....
22	Burnley	Lancashire	....	....	....
	Totals	....	4,680,664	5,888,026	6,367,177

No.	Names of Societies.	Counties.	1889.	1890.	1891.
			£	£	£
1	Rochdale Equitable Pioneers	Lancashire	270,675	270,583	296,025
2	Rochdale Co-operative Corn Mill	Lancashire	201,159	235,274	315,596
3	Co-operative Wholesale Society	Lancashire	7,028,944	7,429,073	8,766,430
4	Sowerby Bridge Corn Mill	Yorkshire	430,703	472,668	525,734
5	Halifax Industrial	Yorkshire	231,256	241,262	256,326
6	Leeds Industrial and Corn Mill	Yorkshire	639,223	692,435	802,936
7	Oldham Industrial	Lancashire	350,698	345,335	378,008
8	Bury District	Lancashire	246,112	262,624	288,821
9	Halifax Corn Mill	Yorkshire	....	216,516	280,226
10	Manchester Equitable	Lancashire	267,960	282,957	298,154
11	Bolton	Lancashire	392,458	428,529	496,011
12	Gateshead	Durham	282,186	301,347	334,053
13	Barnsley British	Yorkshire	327,704	395,433	498,489
14	Oldham Equitable	Lancashire	242,959	254,074	271,883
15	Huddersfield	Yorkshire	287,844	294,357	312,865
16	Newcastle-on-Tyne	Northumberland	338,339	380,895	432,338
17	Accrington and Church	Lancashire	209,776	....	206,140
18	Bishop Auckland	Durham	229,224	266,886	266,886
19	Brighouse	Yorkshire	219,917	225,464	241,008
20	Bradford	Yorkshire	224,911	223,265	256,500
21	Pendleton	Lancashire	225,488	240,827	279,942
22	Burnley	Lancashire	238,824	256,530	281,727
23	Crook	Durham	....	221,269	....
24	Plymouth	Devonshire	....	212,113	240,675
25	Derby	Derbyshire	....	....	206,315
26	Chester-le-Street	Durham	....	....	213,846
27	Dewsbury	Yorkshire	....	....	200,255
28	Crewe Friendly	Cheshire	....	....	213,703
29	Leigh	Lancashire	....	....	....
30	Eccles	Lancashire	....	....	....
31	Sunderland	Durham	....	....	....
32	Leicester	Leicestershire	....	....	....
33	Annfield Plain	Durham	....	....	....
34	Brightside and Carbrook	Yorkshire	....	....	....
35	Woolwich Royal Arsenal	Kent	....	....	....
36	Oldham Star Corn Mill	Lancashire	....	....	....
	Totals	....	12,886,360	14,149,816	17,160,892

ENGLAND AND WALES.

OF SALES.

during the years 1879 to 1898, exceeded £200,000 a year.

1882.	1883.	1884.	1885.	1886.	1887.	1888.	No.
£	£	£	£	£	£	£	
274,627	276,457	262,270	252,072	246,081	256,736	267,727	1
286,966	259,396	209,912	....	....	....	....	2
4,038,288	4,546,891	4,675,371	4,793.151	5,223,179	5,713,235	6,200,074	3
594,664	499,260	395,502	343.723	333,655	357,886	406,185	4
....	206,058	224,780	226,175	224,870	224,259	223,217	5
438,478	486,784	490,332	495,297	480,204	526,002	558,771	6
320,336	335,672	344,647	330,638	312,230	322,090	337,368	7
240,227	250,123	249,978	256,545	240,239	236,042	241,033	8
....	....	240,363	203,877	....	222,008	....	9
254,124	258,935	240,241	232,998	229,886	233,181	249,340	10
254,414	295,437	326,201	324,467	335,877	327,288	357,001	11
225,202	248,364	248,295	268,720	269,585	266,095	272,877	12
215,421	253,512	266,616	260,112	283,903	293,876	292,635	13
210,581	235,678	239,364	227,873	228,946	228,523	233,454	14
201,718	208,710	....	....	209,426	252,682	269,865	15
....	239,877	286,686	312,719	338,030	328,848	327,911	16
....	....	200,608	208,307	209,291	211,226	214,728	17
....	....	....	....	200,931	209,969	212,471	18
....	....	....	....	....	204,127	209,948	19
....	....	....	....	....	....	202,930	20
....	....	....	....	....	....	204,501	21
....	....	....	....	....	....	213,219	22
7,554,996	8,601,154	8,901,166	8,736,074	9,366,283	10,413,983	11,495,255	

1892.	1893.	1894.	1895.	1896.	1897.	1898.	No.
£	£	£	£	£	£	£	
302,454	290,238	285,143	290,056	292,335	294,650	287,288	1
254,062	....	....	....	....	230,871	205,437	2
9,300,904	9,526,167	9,443,937	10,141,917	11,115,057	11,920,143	12,574,748	3
457,673	366,081	299,781	286,620	311,878	398,912	430,183	4
272,967	266,725	246,160	255,356	286,576	321,627	344,007	5
861,959	847,063	834,569	883,923	957,333	1,124,094	1,250,451	6
380,861	361,926	374,773	382,065	392,483	393,758	419,284	7
293,317	281,620	276,310	278,275	289,551	301,694	311,996	8
274,576	218,216	....	....	227,060	286,523	314,563	9
290,960	274,681	269,492	265,740	274,859	291,288	295,804	10
516,906	526,747	545,584	569,213	586,365	581,796	580,967	11
344,797	350,242	333,065	335,241	364,017	359,619	361,339	12
531,964	482,129	471,626	467,172	505,541	529,881	547,885	13
267,446	255,666	260,022	263,909	272,099	284,404	301,331	14
307,116	293,917	272,173	292,567	323,353	341,677	345,255	15
445,004	426,212	376,655	383,985	422,751	481,413	486,602	16
207,945	....	211,498	217,537	229,484	236,103	228,289	17
308,426	297,035	304,806	301,152	330,702	362,870	392,200	18
232,648	216,745	214,331	228,613	244,480	259,852	266,582	19
290,930	304,595	248,977	279,844	321,736	380,158	396,450	20
290,710	307,642	316,979	339,650	376,711	412,106	396,473	21
298,019	291,224	319,630	337,389	360,951	363,413	370,891	22
203,953	210,006	213,203	202,123	202,271	213,716	224,277	23
240,570	237,235	258,529	274,484	304,404	334,796	350 355	24
213,889	212,984	231,961	242,935	261,598	310,775	327,223	25
202,596	203,801	....	....	....	203,289	227,858	26
237,147	227,499	224,070	235,592	248,825	249,696	250,747	27
226,566	212,947	....	....	200,342	241,460	268,610	28
231,464	209,765	234,188	253,675	262,282	301,149	310,243	29
....	....	202,738	212,249	250,340	267,199	281,956	30
....	....	....	....	210,041	263,240	262,868	31
....	....	....	....	....	201,952	204,955	32
....	....	....	....	....	210,073	209,549	33
....	....	....	....	....	240,901	280,966	34
....	....	....	....	....	201,723	252,298	35
....	....	....	....	....	208,203	263,274	36
18,287,829	17,699,108	17,270,200	18,224,282	20,425,425	23,605,024	24,823,804	

CO-OPERATIVE SOCIETIES—ENGLAND AND WALES.

Bird's-eye View of Sales.

TABLE (7) showing the Sales *of all* Societies *which, during the years 1895 to 1898, were over £100,000 and under £200,000 a year; also* Sales *of the same* Societies *for the year 1888.*

No.	Name of Society.	County.	1888.	1895.	1896.	1897.	1898.
			£	£	£	£	£
1	Crewe Friendly	Cheshire	148,217	171,916	(over)	(over)	(over)
2	Stockport (Chestergate)	Cheshire	57,879	135,744	137,167	136,529	135,550
3	Runcorn	Cheshire	77,318	....	....	....	103,631
4	Carlisle	Cumberland	86,618	109,041	106,689	120,184	136,849
5	Cleator Moor	Cumberland	147,735	122,412	123,968	130,897	135,876
6	Ripley	Derbyshire	62,172	128,560	141,370	161,581	175,147
7	Annfield Plain	Durham	104,242	192,552	199,362	(over)	(over)
8	Blaydon	Durham	171,422	140,789	150,892	168,760	180,713
9	Chester-le-Street	Durham	162,830	198,337	194,755	(over)	(over)
10	Haswell	Durham	104,923	124,046	126,288	130,616	132,962
11	Jarrow Industrial	Durham	47,988	....	....	112,015	121,057
12	Stockton-on-Tees	Durham	67,983	137,053	157,007	185,374	197,126
13	Sunderland	Durham	67,669	136,939	(over)	(over)	(over)
14	West Stanley	Durham	48,009	125,855	130,627	144,220	153,808
15	Birtley	Durham	62,348	....	112,298	115,342	118,919
16	Ryhope and Silksworth	Durham	52,483	117,769	117,490	128,753	152,631
17	Hartlepools	Durham	22,290	102,336	106,373	124,348	141,762
18	Derwent Flour Mills	Durham	89,877	....	....	102,382	113,120
19	Darlington	Durham	59,238	....	....	....	103,654
20	Stratford	Essex	152,470	136,775	147,946	176,570	178,364
21	Colchester	Essex	40,713	....	....	....	106,751
22	Cwmbach and Aberaman	Glamorgan	66,529	136,917	135,652	140,938	117,172
23	Gloucester	Gloucestershire	122,931	....	105,388	120,269	128,041
24	Woolwich Royal Arsenal	Kent	118,929	147,462	173,512	(over)	(over)

			£	£	£	£	£
25	Ashton-under-Lyne	Lancashire	45,377	....	....	112,925	124,087
26	Barrow-in-Furness	Lancashire	51,998	101,743	117,296	133,996	149,681
27	Failsworth	Lancashire	110,387	156,969	165,170	169,063	194,632
28	Farnworth and Kearsley	Lancashire	80,000	125,341	138,440	148,019	140,833
29	Heywood	Lancashire	95,784	113,800	117,032	120,037	125,073
30	Lancaster and Skerton	Lancashire	67,991	....	....	104,318	116,190
31	Nelson	Lancashire	63,782	164,418	181,236	180,603	174,344
32	Oldham Star Corn Mill	Lancashire	187,651	151,944	179,834	(over)	(over)
33	Over Darwen Industrial	Lancashire	106,488	140,319	146,547	163,018	174,505
34	Preston	Lancashire	104,457	187,728	198,204	189,614	188,991
35	Radcliffe and Pilkington	Lancashire	124,488	136,501	139,763	135,335	137,674
36	Rochdale Corn Mill	Lancashire	178,649	180,048	178,135	(over)	(over)
37	Rochdale Provident	Lancashire	76,328	....	104,040	115,543	124,527
38	St. Helens	Lancashire	54,056	105,058	107,931	131,625	148,037
39	Leicester	Leicestershire	119,975	165,519	187,670	(over)	(over)
40	Lincoln	Lincolnshire	126,329	176,615	183,722	185,271	192,643
41	Canteen and Mess	Middlesex	....	....	....	102,357	139,684
42	Norwich	Norfolk	22,430	....	....	108,442	112,217
43	Peterboro'	North'mpt'nshire	37,780	....	120,002	138,356	157,807
44	Cramlington	Northumberland	57,694	117,720	116,543	128,314	138,223
45	Batley	Yorkshire	114,788	129,111	135,154	138,253	138,126
46	Brightside and Carbrook	Yorkshire	23,580	135,285	193,018	(over)	(over)
47	Doncaster	Yorkshire	72,604	131,504	143,639	159,660	166,397
48	Ecclesall, Sheffield	Yorkshire	15,223	....	....	128,056	157,719
49	Heckmondwike	Yorkshire	148,684	148,883	157,807	160,444	166,233
50	Keighley	Yorkshire	118,865	170,005	180,714	186,951	198,236
51	Masboro'	Yorkshire	58,055	....	....	110,008	....
52	Middlesbrough	Yorkshire	104,526	107,018	129,194	167,830	193,944
53	Morley	Yorkshire	99,237	121,966	134,777	137,602	136,323
54	Sowerby Bridge	Yorkshire	97,917	105,358	110,386	111,143	109,706
55	Todmorden	Yorkshire	118,460	127,266	127,727	127,926	130,097
56	Wakefield	Yorkshire	65,774	....	....	109,814	116,869
57	Windhill	Yorkshire	108,585	123,743	134,143	134,361	136,212
58	York	Yorkshire	3,420	....	....	111,498	124,513
	Totals		5,004,175	5,688,365	6,194,908	6,349,160	6,946,656

SALES OF CIVIL SERVICE SUPPLY STORES.

	Civil Service Supply.	Civil Service (Haymarket).	New Civil Service.
	£	£	£
1871	625,305	....	....
1872	712,399	....	....
1873	819,428	....	....
1874	896,094	....	....
1875	925,332	....	....
1876	983,545	....	....
1877	946,780	....	....
1878	1,384,042	....	....
1879	1,474,923	....	....
1880	1,420,619	514,399	....
1881	1,488,507	520,155	139,367
1882	1,603,670	497,650	....
1883	1,682,655	329,805	149,478
1884	1,691,455	481,560	148,975
1885	1,758,648	468,992	150,948
1886	1,743,306	465,096	150,383
1887	1,732,483	469,456	155,000
1888	1,763,814	473,817	158,028
1889	1,775,500	481,120	158,317
1890	1,789,397	481,352	164,160
1891	1,817,779	475,066	178,761
1892	1,749,384	471,133	168,582
1893	1,675,848	448,171	158,313
1894	1,663,970	439,283	154,541
1895	1,670,849	442,942	149,185
1896	1,707,780	448,129	143,289
1897	1,694,710	437,638	138,836
1898	1,672,520	424,588	127,392

Above we give the Sales of the Civil Service Supply Stores as distinct from the ordinary distributive societies appearing in the previous tables.

LIST OF PUBLIC ACTS OF PARLIAMENT.

(62 AND 63 VICTORIA—1899).

**** *The figures before each Act denote the Chapter.*

1. Partridge Shooting (Ireland).
2. Consolidated Fund (No. 1).
3. Army (Annual).
4. Solicitors.
5. Public Libraries (Scotland).
6. Supreme Court of Judicature.
7. Metropolis Water.
8. Infectious Diseases (Notification) Extension.
9. Finance.
10. Parish Councils (Tenure of Office).
11. Fine or Imprisonment (Scotland and Ireland).
12. Reformatory Schools.
13. Elementary Education (School Attendance) Act (1893) Amendment.
14. London Government.
15. Metropolis Management Acts Amendment (Bye-laws).
16. Gordon Memorial College at Khartoum.
17. Tithe Rentcharge (Rates).
18. Congested Districts Board (Ireland).
19. Electric Lighting (Clauses).
20. Bodies Corporate (Joint Tenancy).
21. Seats for Shop Assistants.
22. Summary Jurisdiction.

LIST OF PUBLIC ACTS OF PARLIAMENT.—*continued.*

23. Anchors and Chain Cables.
24. University of London.
25. Land Tax Commissioners' Names.
26. Metropolitan Police.
27. Marriages Validity.
28. Manchester Canonries.
29. Baths and Washhouses.
30. Commons.
31. Public Works Loans.
32. Elementary Education (Defective and Epileptic Children).
33. Board of Education.
34. Expiring Laws Continuance.
35. Inebriates.
36. Colonial Loans.
37. Poor Law.
38. Telegraph.
39. Isle of Man (Customs).
40. Reserve Forces.
41. Military Works.
42. Naval Works.
43. Royal Niger Company.
44. Small Dwellings Acquisition.
45. Patriotic Fund.
46. Improvement of Land.
47. Private Legislation Procedure (Scotland).
48. Lincolnshire Coroners.
49. Appropriation.
50. Agriculture and Technical Instruction (Ireland).
51. Sale of Food and Drugs.

NATIONAL INCOME AND EXPENDITURE.

An Account of the Public Income and Expenditure of the United Kingdom of Great Britain and Ireland in the Year ended March 31, 1899, presented to Parliament pursuant to Act 17 and 18 Vict., c. 94, s. 2.

INCOME.

	£	s.	d.
Customs	20,850,000	0	0
Excise	29,200,000	0	0
Estate, &c., Duties	11,400,000	0	0
Stamps (excluding Fee, &c., Stamps)	7,630,000	0	0
Land Tax and House Duty	2,370,000	0	0
Property and Income Tax	18,000,000	0	0
Post Office	12,710,000	0	0
Telegraph Service	3,150,000	0	0
Crown Lands (Net)	430,000	0	0
Suez Canal Share—Receipts, &c.	713,554	3	0
Miscellaneous (including, Fee, &c., Stamps)	1,882,639	5	10
Total Income	£108,336,193	8	10

EXPENDITURE.

CONSOLIDATED FUND SERVICES.

National Debt Services

Inside the Permanent or Fixed Annual Charge.

Funded Debt—	£	s.	d.	£	s.	d.
Interest	16,009,557	6	3			
Terminable Annuities	7,281,702	8	7			
Interest on Unfunded Debt	139,254	2	3			
Management of the Debt	175,027	3	3			
New Sinking Fund	1,394,458	19	8			
				25,000,000	0	0

Outside the Permanent or Fixed Annual Charge.

Other Consolidated Fund Services—	£	s.	d.	£	s.	d.
Civil List	408,773	10	8			
Annuities and Pensions	281,567	13	0			
Salaries and Allowances	79,113	10	9			
Courts of Justice	517,068	14	5			
Miscellaneous Services	305,329	18	11			
Payments to Local Taxation Account	452,382	8	0			
				2,044,235	15	9

SUPPLY SERVICES.

Army	19,999,700	0	0			
Ordnance Factories	300	0	0			
Navy	24,068,000	0	0			
Miscellaneous Civil Services	22,025,000	0	0			
Customs and Inland Revenue Departments	2,816,000	0	0			
Post Office	8,030,000	0	0			
Telegraph Service	3,347,000	0	0			
Post Office Packet Service	820,000	0	0			
				81,106,000	0	0
Total Expenditure				108,150,235	15	9
Excess of Income over Expenditure				185,957	13	1
				£108,336,193	8	10

IMPORT DUTIES IN THE UNITED KINGDOM.

TABLE showing the several ARTICLES *subject to* IMPORT DUTIES *in the* UNITED KINGDOM, *and the* RATE *of* DUTY *levied upon each* ARTICLE, *according to the* TARIFF *in operation on the 1st July, 1899.*

ARTICLES.		Rates of Duty.		
		£	s.	d.
COCOA, Raw	per lb.	0	0	1
Husks and Shells	per cwt.	0	2	0
Cocoa or Chocolate, ground, prepared, or in any way manufactured	per lb.	0	0	2
(For additional duty, if Spirit has been used in the manufacture, see next page.)				
Cocoa Butter	„	0	0	1
COFFEE, Raw	per cwt.	0	14	0
Kiln-dried, roasted, or ground	per lb.	0	0	2
CHICORY :				
Raw or kiln-dried	per cwt.	0	13	3
Roasted or ground	per lb.	0	0	2
Chicory (or other vegetable substances) and Coffee roasted and ground, mixed	„	0	0	2
FRUIT—Dried :—				
Currants	per cwt.	0	2	0
Figs, Fig Cake, Plums not preserved in Sugar, Prunes, and Raisins	„	0	7	0
TEA	per lb.	0	0	4
TOBACCO—Unmanufactured :—				
Containing 10lbs. or more of moisture in every 100lbs. weight thereof	„	0	2	8
Containing less than 10lbs. of moisture in every 100lbs. weight thereof	„	0	3	0
TOBACCO—Manufactured :—				
Cigars	„	0	5	0
Cavendish or Negro-head	„	0	3	10
Snuff containing more than 13lbs. of moisture in every 100lbs. weight thereof	„	0	3	2
Snuff not containing more than 13lbs. of moisture in every 100lbs. weight thereof	„	0	3	10
Other Manufactured Tobacco, and Cavendish or Negro-head Manufactured in Bond from Unmanufactured Tobacco	„	0	3	5
WINE :—				
Not exceeding 30° of Proof Spirit	per gallon.	0	1	3
Exceeding 30° but not exceeding 42° of Proof Spirit	„	0	3	0
Every degree or part of a degree beyond the highest above charged, an additional duty of	„	0	0	3
Degree not to include fractions of the next higher degree. Wine includes Lees of Wine.				
Additional duty on Sparkling Wine imported in Bottle	„	0	2	6
„ „ Still „ „ „	„	0	1	0

IMPORT DUTIES IN THE UNITED KINGDOM.

Articles.		Rates of Duty. £ s. d.
Import Duties to countervail Excise Duty upon British Beer:		
Beer called Mum, Spruce, or Black Beer, and Berlin White Beer and other preparations, whether fermented or not fermented, of a character similar to Mum, Spruce, or Black Beer, the worts of which were, before fermentation, of a specific gravity—		
Not exceeding 1,215°	per every 36 galls.	1 8 0
Exceeding 1,215°	„	1 12 10
Beer of any other description, the worts of which were, before fermentation, of a specific gravity of 1,055°	„	0 7 0
And so on in proportion for any difference in gravity.		
Import Duties to countervail Excise Duty upon British Spirits.		
Spirits and Strong Waters:		
For every gallon, computed at hydrometer proof, of Spirits of any description (except Perfumed Spirits), including Naphtha or Methylic Alcohol, purified so as to be potable, and mixtures and preparations containing Spirits	per proof gallon.	0 10 10
Additional on Spirits imported in bottle, enumerated and tested, and Sweetened Spirits imported in bottle, unenumerated and tested	„	0 1 0
Liqueurs, Cordials, or other preparations containing Spirits, in Bottle, entered in such a manner as to indicate that the strength is not to be tested	per gallon.	0 15 8
Perfumed Spirits	„	0 17 3
Additional if imported in bottle	„	0 1 0
Spirits, Methylated, in Bond	per proof gallon.	0 0 4
Chloroform	per lb.	0 3 1
Chloral Hydrate	„	0 1 3
Cocoa or Chocolate, in the manufacture of which Spirit has been used, in addition to any other duty to which such Cocoa or Chocolate is at present liable	„	0 0 0½
Collodion	per gallon.	1 5 0
Confectionery, in the manufacture of which Spirit has been used, in addition to any other duty to which such Confectionery is at present liable	per lb.	0 0 0½
Ether, Acetic	„	0 1 10
„ Butyric	per gallon.	0 15 8
„ Sulphuric	„	1 6 2
Ethyl, Bromide	per lb.	0 1 0
„ Chloride	per gallon.	0 15 8
„ Iodide of	„	0 13 7
Methylic Alcohol { purified so as to be potable—see Naphtha „ { Spirits and Strong Waters.		
Soap, Transparent, in the manufacture of which Spirit has been used	per lb.	0 0 3
Playing Cards (Import Duty to countervail Stamp Duty).	doz. packs.	0 3 9

Note as to Articles charged with Import Duties:—In this Return, sub-divisions of Articles of a similar nature, and subject to the same rate of duty, are classed under one head.

INCOME TAX RATES

From its First Imposition in 1842 to the Present Time.

From and to April 5th.	Income free under.	On £100 to £150.	On £100 and upw'ds.	Chancellor of the Exchequer.	Premier.
	£	Rate in the £.			
1842 to 1846	150	—	7d.	Henry Goulburn.	Sir Robert Peel.
1846 „ 1852	Do.	—	7d.	Sir Charles Wood.	Lord John Russell.
1852 „ 1853	Do.	—	7d.	Benjamin Disraeli.	Earl of Derby.
1853 „ 1854	100	5d.	7d.	William E. Gladstone.	Earl of Aberdeen.
1854 „ 1855	Do.	10d.	1s. 2d.	Do.	Do.
1855 „ 1857	Do.	11⅓d.	1s. 4d.	Sir G. Cornewall Lewis.	Viscount Palmerston.
1857 „ 1858	Do.	5d.	7d.	Do.	Do.
1858 „ 1859	Do.	5d.	5d.	Do.	Do.
1859 „ 1860	Do.	6½d.	9d.	Benjamin Disraeli.	Earl of Derby.
1860 „ 1861	Do.	7d.	10d.	William E. Gladstone.	Viscount Palmerston.
1861 „ 1863	*100	6d.	9d.	Do.	Do.
1863 „ 1864	Do.	7d.		Do.	Do.
1864 „ 1865	Do.	6d.		Do.	Do.
1865 „ 1866	Do.	4d.		Do.	Do.
1866 „ 1867	Do.	4d.		Do.	Earl Russell.
1867 „ 1868	Do.	5d.		Benjamin Disraeli.	Earl of Derby.
1868 „ 1869	Do.	6d.		George Ward Hunt.	Benjamin Disraeli.
1869 „ 1870	Do.	5d.		Robert Lowe.	William E. Gladstone.
1870 „ 1871	Do.	4d.		Do.	Do.
1871 „ 1872	Do.	6d.		Do.	Do.
1872 „ 1873	Do.	4d.		Do.	Do.
1873 „ 1874	Do.	3d.		Do.	Do.
1874 „ 1876	Do.	2d.		Sir Stafford Northcote.	Benjamin Disraeli.
1876 „ 1878	†150	3d.		Do.	Earl of Beaconsfield.
1878 „ 1880	Do.	5d.		Do.	Do.
1880 „ 1881	Do.	6d.		William E. Gladstone.	William E. Gladstone.
1881 „ 1882	Do.	5d.		Do.	Do.
1882 „ 1883	Do.	6½d.		Do.	Do.
1883 „ 1884	Do.	5d.		Hugh C. E. Childers.	Do.
1884 „ 1885	Do.	6d.		Do.	Do.
1885 „ 1886	Do.	8d.		Sir M. Hicks-Beach.	Marquis of Salisbury.
1886 „ 1887	Do.	8d.		Sir William Harcourt.	William E. Gladstone.
1886 „ 1887	Do.	8d.		Lord Rand. Churchill.	Marquis of Salisbury.
1887 „ 1888	Do.	7d.		G. J. Goschen.	Do.
1888 „ 1889	Do.	6d.		Do.	Do.
1889 „ 1890	Do.	6d.		Do.	Do.
1890 „ 1891	Do.	6d.		Do.	Do.
1891 „ 1892	Do.	6d.		Do.	Do.
1892 „ 1893	Do.	6d.		Sir W. Harcourt.	William E. Gladstone.
1893 „ 1894	Do.	7d.		Do.	Do.
1894 „ 1895	‡160	8d.		Do.	Earl Rosebery.
1895 „ 1896	Do.	8d.		Sir M. Hicks-Beach.	Marquis of Salisbury.
1896 „ 1897	Do.	8d.		Do.	Do.
1897 „ 1898	Do.	8d.		Do.	Do.
1898 „ 1899	Do.	8d.		Do.	Do.
1899 „ 1900	Do.	8d.		Do.	Do.

* Differential rate upon scale of incomes abolished. Incomes under £100 are exempt; and incomes of £100 and under £199 per annum have an abatement from the assessment of £60:—thus, £100 pays on £40; £160 upon £100; £199 upon £139; but £200 pays on £200.

† Under £150 exempt; if under £400 the tax is not chargeable upon the first £120.

‡ Under £160 exempt; if under £400 the tax is not chargeable upon the first £160; above £400 and up to £500, an abatement of £150; not exceeding £600, abatement of £120; not exceeding £700, abatement of £70.

AVERAGE PRICE PER £100 *of the* THREE PER CENT CONSOLIDATED STOCK *of the* PUBLIC FUNDS *of the* UNITED KINGDOM, *in* EACH MONTH *in* EACH YEAR *from* 1883 *to* 1888, *and of the* NEW TWO-AND-THREE-QUARTER PER CENT CONSOLIDATED STOCK MONTHLY *from* MARCH, 1888, *to* DECEMBER, 1898.

								New $2\frac{3}{4}$ per cent Consolidated Stock.									
MONTHS.	1883.	1884.	1885.	1886.	1887.	1888.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
January....	$101\frac{1}{2}$	$101\frac{1}{8}$	$99\frac{3}{4}$	$99\frac{1}{8}$	$100\frac{3}{4}$	$102\frac{1}{8}$	..	$98\frac{1}{8}$	$97\frac{1}{8}$	$96\frac{3}{4}$	$95\frac{3}{4}$	$98\frac{1}{8}$	$98\frac{13}{16}$	$104\frac{1}{2}$	107	112	$112\frac{3}{4}$
February ..	$102\frac{1}{4}$	$101\frac{1}{8}$	$99\frac{1}{4}$	$100\frac{1}{8}$	$100\frac{3}{4}$	$102\frac{2}{8}$	..	99	$97\frac{1}{8}$	$97\frac{1}{8}$	$95\frac{3}{4}$	$98\frac{3}{4}$	$99\frac{1}{2}$	$104\frac{3}{8}$	$108\frac{7}{8}$	$112\frac{1}{2}$	$112\frac{5}{8}$
March	$102\frac{1}{8}$	$101\frac{9}{10}$	$97\frac{2}{8}$	$100\frac{7}{10}$	$101\frac{2}{8}$	$101\frac{1}{8}$	$100\frac{5}{8}$	$97\frac{1}{8}$	$97\frac{1}{4}$	$97\frac{9}{16}$	$95\frac{3}{4}$	$98\frac{3}{16}$	$99\frac{5}{8}$	$104\frac{1}{2}$	$109\frac{9}{16}$	$111\frac{7}{8}$	$111\frac{11}{16}$
April	$102\frac{3}{8}$	$102\frac{1}{8}$	$96\frac{1}{4}$	$100\frac{3}{8}$	$102\frac{2}{8}$	101	$100\frac{1}{16}$	$98\frac{1}{2}$	98	$96\frac{1}{16}$	$96\frac{5}{16}$	99	100	$105\frac{1}{16}$	$111\frac{1}{8}$	112	$110\frac{11}{16}$
May	$101\frac{7}{8}$	$101\frac{1}{2}$	$99\frac{1}{4}$	$101\frac{2}{8}$	$103\frac{1}{8}$	$101\frac{1}{8}$	$99\frac{1}{4}$	99	$98\frac{1}{8}$	$95\frac{1}{4}$	$97\frac{1}{2}$	$98\frac{9}{16}$	$100\frac{9}{16}$	$105\frac{15}{16}$	$112\frac{1}{16}$	$113\frac{1}{4}$	$110\frac{15}{16}$
June	$100\frac{1}{2}$	$100\frac{1}{16}$	$99\frac{3}{4}$	$100\frac{9}{10}$	$101\frac{5}{8}$	$100\frac{1}{2}$	$99\frac{9}{16}$	$98\frac{1}{8}$	$97\frac{1}{8}$	$95\frac{1}{16}$	$96\frac{3}{4}$	99	$101\frac{3}{16}$	$106\frac{1}{2}$	113	$112\frac{7}{8}$	$111\frac{5}{16}$
July	$99\frac{13}{16}$	$100\frac{1}{8}$	$99\frac{7}{8}$	$101\frac{3}{10}$	$101\frac{3}{8}$	$100\frac{1}{2}$	$99\frac{9}{16}$	$98\frac{3}{8}$	$96\frac{1}{8}$	$95\frac{3}{4}$	$96\frac{13}{16}$	99	$101\frac{9}{16}$	$107\frac{5}{16}$	$113\frac{1}{2}$	$112\frac{7}{8}$	$111\frac{1}{2}$
August	$99\frac{7}{8}$	$100\frac{3}{8}$	100	$101\frac{1}{10}$	$101\frac{1}{2}$	$100\frac{1}{4}$	$99\frac{3}{8}$	$98\frac{1}{10}$	$96\frac{1}{4}$	96	$97\frac{1}{8}$	98	$102\frac{1}{8}$	$107\frac{7}{16}$	$113\frac{1}{16}$	$112\frac{1}{2}$	$110\frac{3}{4}$
September..	$100\frac{5}{8}$	$101\frac{1}{6}$	$100\frac{1}{8}$	$100\frac{9}{10}$	$101\frac{3}{10}$	$100\frac{2}{8}$	98	97	$95\frac{2}{8}$	$94\frac{15}{16}$	97	$98\frac{3}{4}$	$102\frac{3}{16}$	$107\frac{5}{8}$	$110\frac{1}{16}$	$111\frac{1}{2}$	$109\frac{15}{16}$
October	$101\frac{1}{4}$	$100\frac{9}{10}$	$100\frac{3}{8}$	$100\frac{4}{8}$	$102\frac{2}{8}$	$100\frac{2}{8}$	$97\frac{1}{4}$	97	$94\frac{3}{8}$	$94\frac{7}{8}$	97	$98\frac{1}{16}$	$101\frac{1}{2}$	$107\frac{7}{16}$	$108\frac{13}{16}$	$111\frac{5}{8}$	$109\frac{1}{8}$
November..	$101\frac{1}{16}$	$100\frac{1}{2}$	$100\frac{1}{2}$	$101\frac{3}{8}$	$103\frac{1}{6}$	101	97	97	$94\frac{3}{8}$	95	$97\frac{1}{4}$	$98\frac{1}{4}$	$102\frac{3}{4}$	$106\frac{3}{8}$	$110\frac{5}{16}$	$112\frac{7}{8}$	$110\frac{1}{16}$
December ..	$100\frac{1}{2}$	$99\frac{1}{3}$	100	$100\frac{1}{2}$	$101\frac{7}{10}$	$99\frac{3}{8}$	$96\frac{7}{16}$	$97\frac{1}{8}$	$95\frac{3}{8}$	$95\frac{1}{4}$	$97\frac{3}{8}$	$98\frac{1}{16}$	$103\frac{1}{8}$	$106\frac{11}{16}$	$111\frac{1}{4}$	$112\frac{3}{4}$	$110\frac{5}{16}$
Average for the year..	$101\frac{3}{16}$	101	$99\frac{1}{3}$	$100\frac{4}{8}$	$101\frac{4}{8}$	101	..	98	$96\frac{1}{3}$	$95\frac{3}{4}$	$96\frac{11}{16}$	$98\frac{1}{2}$	$101\frac{1}{16}$	$106\frac{1}{8}$	$110\frac{3}{4}$	$112\frac{13}{32}$	$110\frac{15}{16}$

Average Minimum Rate per Cent of Discount Charged by the Bank of England in each Month in each Year from 1883 to 1898.

Months.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	Months.
Jan.....	4¾	3	5	3⅜	5	3⅜	4 1/10	6	4	3⅓	2 9/10	3	2	2	3⅞	3	Jan.
Feb.....	3¾	3 11/28	5	2⅘	4	2⅜	3	5⅘	3	3	2½	2⅜	2	2	3½	3	Feb.
March...	3	3 6/31	3 55/62	2	3½	2⅛	3	4⅛	3	3	2½	2	2	2	3	3	March.
April....	3	2½	3½	2	2⅔	2	2⅜	3⅜	3¼	2½	2½	2	2	2	2⅝	3 13/16	April.
May.....	3 11/16	2½	2 23/31	2⅘	2	2⅜	2½	3	4½	2	3½	2	2	2	2¼	3⅞	May.
June....	4	2⅓	2	2⅜	2	2⅜	2½	3⅛	3⅜	2	3	2	2	2	2	3	June.
July....	4	2	2	2½	2	2½	2½	4	2½	2	2½	2	2	2	2	2½	July.
August..	4	2	2	2⅜	2⅘	2⅘	3	4⅔	2½	2	4	2	2	2	2	2½	August.
Sept....	3 13/16	2	2	3½	4	3⅜	4 1/10	4⅕	2⅜	2	4¼	2	2	2 7/15	2⅛	2⅝	Sept.
Oct.....	3	2⅝	2	3⅜	4	5	5	5	3	2⅔	3	2	2	3⅓	2⅝	3⅝	October.
Nov.....	3	4⅝	2 19/30	4	4	5	5	5⅘	4	3	3	2	2	4	3	4	Nov.
Dec.....	3	5	3 15/31	4½	4	5	5	5 1/10	3⅔	3	3	2	2	4	3	4	Dec.
Average for the year..	3 9/16	2 19/20	3	3	3⅓	3⅛	3½	4½	3⅓	2½	3 1/20	2⅑	2	2½	2⅝	3¼	Average for the year.

DEALINGS WITH LAND.

SCALE OF LAW COSTS ON THE SALE, PURCHASE, OR MORTGAGE OF REAL PROPERTY, HOUSES, OR LAND.

	For the 1st £1,000.	For the 2nd and 3rd £1,000.	For the 4th and each subsequent £1,000 up to £10,000.	For each subsequent £1,000 up to £100,000.*
	Per £100.	Per £100.	Per £100.	Per £100.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Vendor's solicitor for negotiating a sale of property by private contract	1 0 0	1 0 0	0 10 0	0 5 0
Do., do., for conducting a sale of property by public auction, including the conditions of sale—				
When the property is sold	1 0 0	0 10 0	0 5 0	0 2 6
When the property is not sold, then on the reserve price† ..	0 10 0	0 5 0	0 2 6	0 1 3
Do., do., for deducing title to freehold, copyhold, or leasehold property, and perusing and completing conveyance (including preparation of contract or conditions of sale, if any)	1 10 0	1 0 0	0 10 0	0 5 0
Purchaser's solicitor for negotiating a purchase of property by private contract..	1 0 0	1 0 0	0 10 0	0 5 0
Do., do., for investigating title to freehold, copyhold, or leasehold property, and preparing and completing conveyance (including perusal and completion of contract, if any)	1 10 0	1 0 0	0 10 0	0 5 0
Mortgagor's solicitor for deducing title to freehold, copyhold, or leasehold property, perusing mortgage, and completing....	1 10 0	1 0 0	0 10 0	0 5 0
Mortgagee's solicitor for negotiating loan	1 0 0	1 0 0	0 5 0	0 2 6
Do., do., for investigating title to freehold, copyhold, or leasehold property, and preparing and completing mortgage ..	1 10 0	1 0 0	0 10 0	0 5 0

Vendor's or mortgagor's solicitor for procuring execution and acknowledgment of deed by a married woman, £2. 10s. extra.

Where the prescribed remuneration would amount to less than £5 the prescribed remuneration is £5, except on transactions under £100, in which case the remuneration of the solicitor for the vendor, purchaser, mortgagor, or mortgagee is £3.

* Every transaction exceeding £100,000 to be charged for as if it were for £100,000.

† A minimum charge of £5 to be made whether a sale is effected or not.

Scale of Law Costs as to Leases, or Agreements for Leases, at Rack Rent (other than a Mining Lease, or a Lease for Building Purposes, or Agreement for the same).

LESSOR'S SOLICITOR FOR PREPARING, SETTLING, AND COMPLETING LEASE AND COUNTERPART.

Where the rent does not exceed £100, £7. 10s. per cent on the rental, but not less in any case than £5.

Where the rent exceeds £100, and does not exceed £500, £7. 10s. in respect of the first £100 of rent, and £2. 10s. in respect of each subsequent £100 of rent.

Where the rent exceeds £500, £7. 10s. in respect of the first £100 of rent, £2. 10s. in respect of each £100 of rent up to £500, and £1 in respect of every subsequent £100.

Lessee's solicitor for perusing draft and completing—one-half of the amount payable to the lessor's solicitor.

Scale of Law Costs as to Conveyances in Fee, or for any other Freehold Estate reserving rent, or Building Leases reserving rent, or other Long Leases not at Rack Rent (except Mining Leases), or Agreements for the same respectively.

VENDOR'S OR LESSOR'S SOLICITOR FOR PREPARING, SETTLING, AND COMPLETING CONVEYANCE AND DUPLICATE, OR LEASE AND COUNTERPART.

Amount of Annual Rent.	Amount of Remuneration.
Where it does not exceed £5..	£5.
Where it exceeds £5, and does not exceed £50	The same payment as on a rent of £5, and also 20 per cent on the excess beyond £5.
Where it exceeds £50, but does not exceed £150	The same payment as on a rent of £50, and 10 per cent on the excess beyond £50.
Where it exceeds £150	The same payment as on a rent of £150, and 5 per cent on the excess beyond £150.

Where a varying rent is payable the amount of annual rent is to mean the largest amount of annual rent.

Purchaser's or lessee's solicitor for perusing draft and completing—one-half of the amount payable to the vendor's or lessor's solicitor.

RAILWAY ACCIDENTS. Proportion of Passengers Killed and Injured from Causes Beyond their Own Control.

The Following Statement shows the Proportion of Passengers Returned as Killed and Injured from Causes beyond their own Control, in Passenger Journeys, for the Years 1874 to 1898:

Year.	Number of Passengers Killed and Injured from causes beyond their own control, from Accidents to Trains.		Number of Passenger Journeys (exclusive of Journeys by Season-ticket Holders). ‡	Proportion returned as Killed and Injured (from causes beyond their own control) to number carried.	
	Killed.	Injured.		Killed.	Injured.
1874	86	1,613	477,840,411	1 in 5,556,284	1 in 296,243
1875	17	1,212	506,975,234	1 in 29,882,073	1 in 418,296
1876	38	1,279	538,287,295	1 in 14,165,455	1 in 420,865
1877	11	664	551,593,654	1 in 50,144,876	1 in 830,713
1878	24	1,173	565,024,455	1 in 23,542,685	1 in 481,692
1879	*75	602	562,732,890	1 in 7,503,105	1 in 934,772
1880	29	904	603,885,025	1 in 20,823,586	1 in 668,013
1881	23	987	622,160,000	1 in 27,050,435	1 in 630,354
1882	18	803	654,838,295	1 in 36,379,905	1 in 815,489
1883	11	662	683,718,137	1 in 62,156,194	1 in 1,032,806
1884	31	864	694,991,860	1 in 22,419,092	1 in 804,338
1885	6	436	697,213,031	1 in 116,202,171	1 in 1,599,112
1886	8	615	725,584,390	1 in 90,698,049	1 in 1,179,812
1887	25	538	733,670,000	1 in 29,346,800	1 in 1,363,699
1888	11	594	742,830,000	1 in 67,530,000	1 in 1,250,555
1889	†88	†1,016	775,183,073	1 in 8,808,875	1 in 762,975
1890	18	496	817,744,046	1 in 45,430,224	1 in 1,648,677
1891	5	875	845,463,668	1 in 169,092,733	1 in 966,244
1892	21	601	864,435,388	1 in 41,163,589	1 in 1,438,328
1893	17	484	873,177,052	1 in 51,363,356	1 in 1,804,084
1894	16	347	911,412,926	1 in 56,963,307	1 in 2,626,550
1895	5	399	929,770,909	1 in 185,954,182	1 in 2,330,253
1896	5	388	980,339,433	1 in 196,067,887	1 in 2,526,648
1897	18	324	1,030,420,201	1 in 57,245,567	1 in 3,180,309
1898	25	362	1,062,911,116	1 in 42,516,445	1 in 2,936,219

* Including 73 persons lost in the Tay Bridge disaster in the year 1879.
† Including 80 killed and 262 injured in a collision near Armagh. ‡ Number of season tickets issued in 1898, 1,283,045.

THE DEATH DUTIES.

ESTATE DUTY.

THIS duty, which in the case of persons dying after the 1st August, 1894, takes the place of the old Probate Account and Estate Duties, is now regulated by the Finance Acts, 1894, 1896, and 1898.

It is payable on the principal value of all property (save in a few exceptional cases), whether real or personal, settled or not settled, which passes on death.

The rates of duty (which in case of real estate may be paid by instalments) are as follow:—

PRINCIPAL NET VALUE OF ESTATE.	RATE PER CENT.
Above £100, but not above £500	1
„ 500 „ „ 1,000	2
„ 1,000 „ „ 10,000	3
„ 10,000 „ „ 25,000	4
„ 25,000 „ „ 50,000	4½
„ 50,000 „ „ 75,000	5
„ 75,000 „ „ 100,000	5½
„ 100,000 „ „ 150,000	6
„ 150,000 „ „ 250,000	6½
„ 250,000 „ „ 500,000	7
„ 500,000 „ „ 1,000,000	7½
„ 1,000,000	8

Where the net value of the estate (real and personal) does not exceed £100, no duty is payable.

Where the gross value of the estate (real and personal) exceeds £100, but does not exceed £300, the duty is only 30s., and where it exceeds £300, but does not exceed £500, only 50s.

Where the property is settled, an extra duty known as Settlement Estate Duty is in certain cases payable at the rate of 1 per cent.

Debts and funeral expenses are deducted before calculating the duty, except where the gross value of the estate does not exceed £500, and it is desired to pay the fixed duty of 30s. or 50s., as the case may be, instead of the *ad valorem* duty.

THE DEATH DUTIES.

LEGACY DUTY.

This duty is regulated by 55 Geo. III., cap. 184, 51 Vict., cap. 8, and the Finance Act, 1894, and is payable in respect of personal estate (including proceeds of sale of real estate) passing on death, either under a will or in case of intestacy.

The rates of duty are as follow:—

Description of Legatee.	Rate of Duty.
Children of the deceased and their descendants, or the father or mother or any lineal ancestor of the deceased or the husbands or wives of any such persons	£1 per cent.
Brothers and sisters of the deceased and their descendants, or the husbands or wives of any such persons	£3 „
Brothers and sisters of the father or mother of the deceased and their descendants, or the husbands or wives of any such persons	£5 „
Brothers and sisters of a grandfather or grandmother of the deceased and their descendants, or the husbands or wives of any such persons	£6 „
Any person in any other degree of collateral consanguinity or strangers in blood to the deceased	£10 „

SUCCESSION DUTY.

This duty is regulated by 16 and 17 Vict., cap. 51, 51 Vict. cap. 8, and the Finance Act, 1894, and is payable in respect of real estate (including leaseholds) passing on death, and in certain cases in respect of settled personal estate.

The rates of duty are as follow:—

Description of Successor.	Rate of Duty.
Lineal issue or lineal ancestor of the predecessor, or the husband or wife of any such person	£1 per cent.
Brothers and sisters of the predecessor and their descendants, or the husbands or wives of any such persons	£3 „
Brothers and sisters of the father or mother of the predecessor and their descendants, or the husbands or wives of any such persons	£5 „
Brothers and sisters of a grandfather or grandmother of the predecessor and their descendants, or the husbands or wives of any such persons	£6 „
Persons of more remote consanguinity, or strangers in blood..	£10 „

NOTE.—Where the duty under the foregoing tables is at the rate of £1 per cent, an extra duty at the rate of 10s. per cent, and in all other cases an extra duty at the rate of £1. 10s. per cent, is leviable in respect of legacies payable out of or charged on real estate (not including leaseholds) and of successions to real estate (not including leaseholds) on deaths between the 1st July, 1888, and the 2nd August, 1894.

The husband or wife of deceased is exempt from legacy or succession duty.

Legacy duty is payable on the capital value, while succession duty is in certain cases payable on the capital value, and in other cases payable on the value of an annuity equal to the net income of the property, calculated according to the age of the successor.

Where the whole net value of the estate does not exceed £1,000, no legacy, succession, or settlement estate duty is payable.

All pecuniary legacies, residues, or shares of residue, although not of the amount of £20, are subject to duty.

In case of persons dying leaving issue, the estate duty covers all legacy and succession duty which would formerly have been paid by such issue.

In case of persons dying domiciled in the United Kingdom, legacy duty is payable on all movable property wherever situate.

In case of persons dying domiciled abroad, no legacy duty is payable on movable property.

RULES BY WHICH THE PERSONAL ESTATES OF PERSONS DYING INTESTATE ARE DISTRIBUTED.

If the Intestate die, leaving	*His representatives take in the proportion following:—*
Wife and child, or children	One-third to wife, rest to child or children; and if children are dead, then to the representatives (that is, their lineal descendants), except such child or children, not heirs-at-law, who had estate by settlement of intestate, or were advanced by him in his lifetime, equal to other shares.
Wife only, no relations	Up to £500, all to wife; all above the first £500, in each case, half to wife, rest to Crown.
Wife, no near relations	Up to £500, all to wife; all above the first £500, in each case, half to wife, rest to next-of-kin in equal degree to intestate, or their legal representatives.
No wife or child	All to next-of-kin and their legal representatives.
No wife, but child, children, or representatives of them, whether such child or children by one or more wives	All to him, her, or them.
Children by two wives	Equally to all.
If no child, children, or representatives of them	All to next-of-kin in equal degree to intestate.
Child, and grandchild by deceased child	Half to child, half to grandchild, who takes by representation.
Husband	Whole to him.
Father, and brother or sister	Whole to father.
Mother, and brother or sister	Whole to them equally.
Wife, mother, brothers, sisters, and nieces (daughters of deceased brother or sister)	Up to £500, all to wife; all above the first £500, in each case, half to wife, residue to mother, brothers, sisters, and nieces.
Wife, and father	Up to £500, all to wife; all above the first £500, in each case, half to wife, and half to father.
Wife, brothers or sisters, and mother	Up to £500, all to wife; all above the first £500, in each case, half to wife, half to brothers or sisters and mother.
Mother, but no wife, child, father, brother, sister, nephew, or niece	The whole to mother.
Wife, and mother	Up to £500, all to wife; all above the first £500, in each case, half to wife, half to mother.

RULES BY WHICH THE PERSONAL ESTATES OF PERSONS DYING INTESTATE ARE DISTRIBUTED—*continued.*

If the Intestate die, leaving	*His representatives take in the proportion following:—*
Brother or sister of whole blood, and brother or sister of half blood	Equally to both.
Posthumous brother or sister, and mother	Equally to both.
Posthumous brother or sister, and brother or sister born in lifetime of father	Equally to both.
Father's father and mother's mother	Equally to both.
Uncle or aunt's children, and brother or sister's grandchildren	Equally to all.
Grandmother uncle, or aunt	All to grandmother.
Two aunts, nephew and niece	Equally to all.
Uncle, and deceased uncle's child	All to uncle.
Uncle by mother's side, and deceased uncle or aunt's child	All to uncle.
Nephew by brother, and nephew by half-sister	Equally *per capita.**
Nephew by deceased brother, and nephews and nieces by deceased sister	Each in equal shares *per capita*, and not *per stirpes*.
Brother, and grandfather	Whole to brother.
Brother's grandson, and brother or sister's daughter	All to brother or sister's daughter.
Brother, and two aunts	All to brother.
Brother, and wife	Up to £500, all to wife; all above the first £500, in each case, half to brother, half to wife.
Wife, mother, and children of a deceased brother (or sister)	Up to £500, all to wife; all above the first £500, in each case, half to wife, a fourth to mother, and a fourth *per stirpes* to deceased brother's or sister's children.
Wife, brother, or sister, and children of a deceased brother or sister	Up to £500, all to wife; all above the first £500, in each case, half to wife, one-fourth to brother or sister, one-fourth to deceased brother's or sister's children *per stirpes*.
Brother or sister, and children of a deceased brother or sister	Half to brother or sister, half to children of deceased brother or sister *per stirpes*.
Grandfather, no nearer relation	All to grandfather.

* That is, taking individually, and not by representation. Thus, if A die, leaving three brothers or sisters, they each take an equal part of his effects in his or her own right. But if either of them die, leaving children, his children would take his share *per stirpes*, that is *through him*, and not in their own rights.

By the Act 19 and 20 Vict., cap. 94, all special *local* customs relating to the estates of intestates are abolished so far as they affect personal property.

RULES OF DIVISION, ACCORDING TO THE LAW OF SCOTLAND, OF THE MOVABLE ESTATE OF A PERSON WHO HAS DIED INTESTATE.

If a person die, leaving	*His movable estate is divided in the following proportions:—*
Wife	Half to wife, other half to deceased's next-of-kin.
Wife and child, or children	One-third to wife, remaining two-thirds to child, or among children equally.
Wife and children, and issue of predeceasing children	One-third to wife, one-third to children equally, and the remaining third between the children and the issue of the predeceasing children—the children taking *per capita*, the latter *per stirpes*.*
Wife and grandchildren	Half to wife, and half to grandchildren equally among them.
Wife, and his children by former marriages	One-third to wife, two-thirds to children equally.
Wife, and her children by last and prior marriages	One-third to wife, remaining two-thirds to *deceased's* children.
Children	Whole to children.
Children, and issue of predeceasing children	Half to children, remaining half between children *per capita*, and issue *per stirpes*.
Grandchildren	Equally to all.
Children by two or more marriages	Equally to all.
Father	Whole to father.
Mother	One-third to mother, other two-thirds to next-of-kin.

* *Per capita*, *i.e.*, by the head; *per stirpes* (by descent), *i.e.*, through their parent and not in their own right. Where property divides *per capita*, it is divided into as many shares as there are children; where *per stirpes*, the share which would have fallen to the predeceasing parent if alive is divided equally among his children.

RULES OF DIVISION, ACCORDING TO THE LAW OF SCOTLAND, OF THE MOVABLE ESTATE OF A PERSON WHO HAS DIED INTESTATE—*continued.*

If a person die, leaving	*His movable estate is divided in the following proportions:—*
Father and mother	Whole to father.
Father and mother, and brothers and sisters	Half to father, half to brothers and sisters equally.
Mother, and brothers and sisters	One-third to mother, remaining two-thirds to brothers and sisters.
Father, mother, brothers, or sisters, and issue of deceased brothers or sisters	Half to father, half to brothers and sisters *per capita*, and issue *per stirpes*.
Mother, brothers, or sisters, and issue of deceased brothers or sisters	One-third to mother, remaining two-thirds as in last example.
Father and mother, and their grandchildren	Half to father, other half to grandchildren equally.
Mother, and her grandchildren	One-third to mother, other two-thirds to grandchildren equally.
Father, mother, children, and grandchildren of deceased brothers or sisters	Half to father, other half between children *per capita*, and grandchildren *per stirpes*.
Mother, children, and grandchildren of deceased brothers or sisters	One-third to mother, other two-thirds among children *per capita*, and grandchildren *per stirpes*.
Brothers or sisters	Equally among them.
Brothers or sisters, and nephews or nieces	Brothers or sisters *per capita*, nephews or nieces *per stirpes*.
Nephews or nieces	Equally.
Grandnephews or nieces	Equally.
Brothers or sisters of full blood, and brothers or sisters of half-blood	Whole to brothers and sisters of full blood.
Brothers or sisters consanguinean (that is, by same father but not same mother) and brothers or sisters uterine (that is, by same mother but not by same father)	Whole to brothers and sisters consanguinean.

RULES OF DIVISION, ACCORDING TO THE LAW OF SCOTLAND, OF THE MOVABLE ESTATE OF A PERSON WHO HAS DIED INTESTATE—*continued.*

If a person die, leaving	*His movable estate is divided in the following proportions:—*
Brothers or sisters consanguinean, and uncles or aunts	Whole to brothers and sisters.
Brothers and sisters uterine, and uncles or aunts	Half to brothers and sisters, other half to uncles and aunts.
Father, mother, and uncles and aunts	Whole to father.
Father, and cousins of full blood	Whole to father.
Mother, and uncles or aunts	One-third to mother, two-thirds to uncles and aunts.
Mother, and cousins of full blood	One-third to mother, two-thirds to cousins equally.
Grandfather, and uncles and aunts	Whole to uncles and aunts.
Grandfather, grandmother, and mother	One-third to mother, two-thirds to grandfather.

Where a wife dies, survived by	*Her movable estate is divided in the following proportions:—*
Husband	Half to husband, other half to next-of-kin.
Husband and children	One-third to husband, rest to children.
Children only	Whole to children.
Children, and issue of deceased children	Half to children, other half among children *per capita*, and issue *per stirpes*.
Children by two or more marriages	Equally to all.

Illegitimate children do not succeed to their father and mother, when the latter leave no will in their favour. When an illegitimate child dies without a will, and leaves neither wife nor children, his estate falls to the Crown.

EXPECTATION OF LIFE.

Expectation of Life Tables were constructed by the late Dr. Farr, of the General Register Office, and were calculated on the death-rates of 1838-54; but since that time very important changes have occurred in the death-rates at different ages; and, consequently, new tables have been constructed by Dr. W. Ogle, who succeeded Dr. Farr, on the basis of the death-rates of 1871-80. The following table gives the results both of the older and the later calculations; the first two columns in the male and female parts, respectively, giving the survivors at each year of life out of a million born of the corresponding sex, by the older and the newer calculation, and the two other columns giving similarly the expectation of life at each year.

AGE.	MALES.				FEMALES.				AGE.
	Of 1,000,000 Born, the Number Surviving at the end of each Year of Life.		Mean After-lifetime (Expectation of Life).		Of 1,000,000 Born, the Number Surviving at the end of each Year of Life.		Mean After-lifetime (Expectation of Life).		
	1838-54.	1871-80.	1838-54.	1871-80.	1838-54.	1871-80.	1838-54.	1871-80.	
Column.	1	2	3	4	5	6	7	8	Column.
0	1,000,000	1,000,000	39·91	41·35	1,000,000	1,000,000	41·85	44·62	0
1	836,405	841,417	46·65	48·05	865,288	871,266	47·31	50·14	1
2	782,626	790,201	48·83	50·14	811,711	820,480	49·40	52·22	2
3	754,849	763,737	49·61	50·86	782,990	793,359	50·20	52·99	3
4	736,845	746,587	49·81	51·01	764,060	775,427	50·43	53·20	4
5	723,716	734,068	49·71	50·87	750,550	762,622	50·33	53·08	5
6	713,881	726,815	49·39	50·38	740,584	755,713	50·00	52·56	6
7	706,156	721,103	48·92	49·77	732,771	750,276	49·53	51·94	7
8	699,688	716,309	48·37	49·10	726,116	745,631	48·98	51·26	8
9	694,346	712,337	47·74	48·37	720,537	741,727	48·35	50·53	9
10	689,857	708,990	47·05	47·60	715,769	738,382	47·67	49·76	10
11	685,982	706,146	46·31	46·79	711,581	735,405	46·95	48·96	11
12	682,512	703,595	45·54	45·96	707,770	732,697	46·20	48·13	12
13	679,256	701,200	44·76	45·11	704,155	730,122	45·44	47·30	13
14	676,057	698,840	43·97	44·26	700,581	727,571	44·66	46·47	14

15	672,776	696,419	43·18	43·41	696,917	724,956	43·90	45·63	15
16	669,296	693,695	42·40	42·58	693,050	722,084	43·14	44·81	16
17	665,529	690,746	41·64	41·76	688,894	718,993	42·40	44·00	17
18	661,402	687,507	40·90	40·96	684,378	715,622	41·67	43·21	18
19	656,868	683,941	40·17	40·17	679,463	711,946	40·97	42·43	19
20	651,903	680,033	39·48	39·40	674,119	707,949	40·29	41·66	20
21	646,502	675,769	38·80	38·64	668,345	703,616	39·63	40·92	21
22	641,028	671,344	38·13	37·89	662,474	699,141	38·98	40·18	22
23	635,486	666,754	37·46	37·15	656,509	694,521	38·33	39·44	23
24	629,882	661,997	36·79	36·41	650,463	689,759	37·68	38·71	24
25	624,221	657,077	36·12	35·68	644,342	684,858	37·04	37·98	25
26	618,503	651,998	35·44	34·96	638,148	679,822	36·39	37·26	26
27	612,731	646,757	34·77	34·24	631,891	674,661	35·75	36·54	27
28	606,906	641,353	34·10	33·52	625,575	669,372	35·10	35·83	28
29	601,026	635,778	33·43	32·81	619,201	663,959	34·46	35·11	29
30	595,089	630,038	32·76	32·10	612,774	658,418	33·81	34·41	30
31	589,094	624,124	32·09	31·40	606,296	652,747	33·17	33·70	31
32	583,036	618,056	31·42	30·71	599,769	646,957	32·53	33·00	32
33	576,912	611,827	30·74	30·01	593,196	641,045	31·88	32·30	33
34	570,716	605,430	30·07	29·33	586,575	635,003	31·23	31·60	34
35	564,441	598,860	29·40	28·64	579,908	628,842	30·59	30·90	35
36	558,083	592,107	28·73	27·96	573,192	622,554	29·94	30·21	36
37	551,634	585,167	28·06	27·29	566,431	616,144	29·29	29·52	37
38	545,084	578,019	27·39	26·62	559,619	609,599	28·64	28·83	38
39	538,428	570,656	26·72	25·96	552,758	602,924	27·99	28·15	39
40	531,657	563,077	26·06	25·30	545,844	596,113	27·34	27·46	40
41	524,761	555,254	25·39	24·65	538,876	589,167	26·69	26·78	41
42	517,734	547,288	24·73	24·00	531,849	582,104	26·03	26·10	42
43	510,567	539,161	24·07	23·35	524,765	574,919	25·38	25·42	43
44	503,247	530,858	23·41	22·71	517,617	567,612	24·72	24·74	44

EXPECTATION OF LIFE—*continued.*

AGE.	MALES.				FEMALES.				AGE.
	Of 1,000,000 Born, the Number Surviving at the end of each Year of Life.		Mean After-lifetime (Expectation of Life).		Of 1,000,000 Born, the Number Surviving at the end of each Year of Life.		Mean After-lifetime (Expectation of Life).		
	1838-54.	1871-80.	1838-54.	1871-80.	1838-54.	1871-80.	1838-54.	1871-80.	
Column.	1	2	3	4	5	6	7	8	Column.
45	495,770	522,374	22·76	22·07	510,403	560,174	24·06	24·06	45
46	488,126	513,702	22·11	21·44	503,122	552,602	23·40	23·38	46
47	480,308	504,836	21·46	20·80	495,768	544,892	22·74	22·71	47
48	472,306	495,761	20·82	20·18	488,339	537,043	22·08	22·03	48
49	464,114	486,479	20·17	19·55	480,833	529,048	21·42	21·36	49
50	455,727	476,980	19·54	18·93	473,245	520,901	20·75	20·68	50
51	447,139	467,254	18·90	18·31	465,572	512,607	20·09	20·01	51
52	438,099	457,022	18·28	17·71	457,814	504,188	19·42	19·34	52
53	428,801	446,510	17·67	17·12	449,966	495,645	18·75	18·66	53
54	419,256	435,729	17·06	16·53	442,047	486,973	18·08	17·98	54
55	409,460	424,677	16·45	15·95	433,331	477,440	17·43	17·33	55
56	399,408	413,351	15·86	15·37	424,239	467,443	16·79	16·69	56
57	389,088	401,740	15·26	14·80	414,761	456,992	16·17	16·06	57
58	378,481	389,827	14·68	14·24	404,895	446,079	15·55	15·45	58
59	367,570	377,591	14·10	13·68	394,636	434,695	14·94	14·84	59
60	356,330	365,011	13·53	13·14	383,974	422,835	14·34	14·24	60
61	344,744	352,071	12·96	12·60	372,895	410,477	13·75	13·65	61
62	332,789	338,820	12·41	12·07	361,387	397,644	13·17	13·08	62
63	320,451	325,256	11·87	11·56	349,436	384,319	12·60	12·51	63
64	307,720	311,368	11·34	11·05	337,031	370,495	12·05	11·96	64
65	294,588	297,156	10·82	10·55	324,165	356,165	11·51	11·42	65
66	281,064	282,638	10·32	10·07	310,833	341,326	10·98	10·90	66
67	267,160	267,829	9·83	9·60	297,048	325,988	10·47	10·39	67
68	252,901	252,763	9·36	9·14	282,819	310,170	9·97	9·89	68
69	238,328	237,487	8·90	8·70	268,177	293,899	9·48	9·41	69

70	223,490	222,056	8·45	8·27	253,161	277,225	9·02	8·95	70
71	208,453	206,539	8·03	7·85	237,822	260,207	8·57	8·50	71
72	193,297	190,971	7·62	7·45	222,230	242,934	8·13	8·07	72
73	178,114	175,449	7·22	7·07	206,464	225,497	7·71	7·65	73
74	163,003	160,074	6·85	6·70	190,620	208,003	7·31	7·25	74
75	148,076	144,960	6·49	6·34	174,800	190,566	6·93	6·87	75
76	133,453	130,227	6·15	6·00	159,126	173,316	6·56	6·51	76
77	119,251	115,986	5·82	5·68	143,722	156,392	6·21	6·16	77
78	105,592	102,359	5·51	5·37	128,711	139,927	5·88	5·82	78
79	92,587	89,449	5·21	5·07	114,229	124,065	5·56	5·50	79
80	80,343	77,354	4·93	4·79	100,394	108,935	5·26	5·20	80
81	68,946	66,153	4·66	4·51	87,323	94,662	4·98	4·90	81
82	58,471	55,842	4·41	4·26	75,119	81,305	4·71	4·63	82
83	48,970	46,489	4·17	4·01	63,862	68,966	4·45	4·37	83
84	40,471	38,132	3·95	3·58	53,615	57,723	4·21	4·12	84
85	32,979	30,785	3·73	3·56	44,419	47,631	3·98	3·88	85
86	26,476	24,436	3·53	3·36	36,284	38,710	3·76	3·66	86
87	20,926	19,054	3·34	3·17	29,202	30,958	3·56	3·46	87
88	16,268	14,576	3·16	2·99	23,135	24,338	3·36	3·26	88
89	12,428	10,926	3·00	2·82	18,027	18,788	3·18	3·08	89
90	9,321	8,015	2·84	2·66	13,802	14,225	3·01	2·90	90
91	6,859	5,748	2·69	2·51	10,376	10,553	2·85	2·74	91
92	4,946	4,025	2·55	2·37	7,650	7,658	2·70	2·58	92
93	3,492	2,749	2·41	2·24	5,526	5,429	2·55	2·44	93
94	2,411	1,828	2·29	2·12	3,908	3,756	2·42	2·30	94
95	1,628	1,183	2·17	2·01	2,704	2,533	2·29	2·17	95
96	1,071	742	2·06	1·90	1,827	1,661	2·17	2·11	96
97	688	452	1·95	1·81	1,204	1,057	2·06	2·03	97
98	430	266	1·85	1·72	774	653	1·96	1·83	98
99	262	151	1·76	1·65	483	389	1·86	1·73	99
100	154	82	1·68	1·61	295	225	1·76	1·62	100

THE QUEEN AND ROYAL FAMILY.

THE QUEEN.—Victoria, of the United Kingdom of Great Britain and Ireland, &c., Queen, Defender of the Faith. Her Majesty was born at Kensington Palace, May 24, 1819; succeeded to the throne, June 20, 1837, on the death of her uncle, King William IV.; was crowned June 28, 1838; and married, February 10, 1840, to his Royal Highness Prince Albert. Her Majesty is the only child of his late Royal Highness Edward, Duke of Kent, son of King George III. The children of Her Majesty are:—

1. Her Royal Highness Victoria Adelaide Mary Louisa, Princess Royal of England and Prussia, born November 21, 1840, and married to his Royal Highness Wilhelm of Prussia, January 25, 1858, died June 15, 1888, and has had issue three sons and four daughters.

2. His Royal Highness Albert Edward, Prince of Wales, born November 9, 1841, married March 10, 1863, Alexandra of Denmark (Princess of Wales), born December 1, 1844, and has issue Prince Albert Victor, born January 8, 1864, died January 14, 1892; George Frederick Ernest Albert, Duke of York, born June 3, 1865, married his cousin Princess Victoria May, only daughter of the Duke of Teck, July 6, 1893, has three children, born June 23, 1894, December 14, 1895, April 25, 1897; Louisa Victoria Alexandra Dagmar, born February 20, 1867, married, July 27, 1889, Alexander William George, Duke of Fife, has two daughters, born October 3, 1891, and April 3, 1893; Victoria Alexandra Olga Mary, born July 6, 1868; Maud Charlotte Mary Victoria, born November 26, 1869; and Alexander John Charles Albert, born April 6, 1871, died April 7, 1871.

3. Her Royal Highness Alice Maud Mary, born April 25, 1843; died December 14, 1878; married his Royal Highness Prince Frederick Louis of Hesse, July 1, 1862, who died March 13, 1892; had issue five daughters and two sons; the second son died by an accident, May, 1873; the youngest daughter died November 15, 1878.

4. His Royal Highness Alfred Ernest Albert, Duke of Saxe-Coburg and Gotha, born August 6, 1844; married the Grand Duchess Marie of Russia, January 9, 1874; and has had issue a son, born October 15, 1874, and four daughters, born October 29, 1875, November 25, 1876, September 1, 1878, and March, 1884.

5. Her Royal Highness Helena Augusta Victoria, born May 25, 1846; married to his Royal Highness Prince Frederick Christian Charles Augustus of Schleswig-Holstein Sonderburg-Augustenburg, July 5, 1866; and has issue living two sons and two daughters.

6. Her Royal Highness Louise Caroline Alberta, born March 18, 1848; married to the Marquis of Lorne, eldest son of the Duke of Argyll, March 21, 1871.

7. His Royal Highness Arthur William Patrick Albert, Duke of Connaught and Strathearn, born May 1, 1850; married Princess Louise Margaret of Prussia, March 13, 1879; issue, a daughter, born January 15, 1882; a son, born January 13, 1883; and a daughter, born March 17, 1886.

8. His Royal Highness Leopold George Duncan Albert, Duke of Albany, born April 7, 1853; married, April 27, 1882, Princess Helen of Waldeck; died March 28, 1884; issue, a daughter, born February 26, 1883, and a son, born July 19, 1884.

9. Her Royal Highness Beatrice Mary Victoria Feodora, born April 14, 1857; married, July 23, 1885, to Prince Henry of Battenberg; issue, three sons and a daughter.

PARLIAMENTS OF THE UNITED KINGDOM.

	Assembled.	Dissolved.	Duration.		Assembled.	Dissolved.	Duration.
	GEORGE III.		Yrs. m. d.		VICTORIA.		Yrs. m. d.
1	Sept. 27, 1796*	June 29, 1802	5 9 2	13	Nov. 15, 1837	June 23, 1841	3 7 8
2	Oct. 29, 1802	Oct. 25, 1806	3 11 27	14	Aug. 19, 1841	July 23, 1847	5 11 4
3	Dec. 15, 1806	April 29, 1807	0 4 14	15	Nov. 18, 1847	July 1, 1852	4 7 13
4	June 22, 1807	Sept. 29, 1812	5 3 7	16	Nov. 4, 1852	Mar. 21, 1857	4 4 17
5	Nov. 24, 1812	June 10, 1818	5 6 16	17	April 30, 1857	April 23, 1859	1 11 23
6	Jan. 14, 1819	Feb. 29, 1820	1 1 15	18	May 31, 1859	July 6, 1865	6 1 6
				19	Feb. 1, 1866	Nov. 11, 1868	2 9 10
	GEORGE IV.			20	Dec. 10, 1868	Jan. 26, 1874	5 1 16
7	April 23, 1820	June 2, 1826	6 1 9	21	Mar. 5, 1874	Mar. 25, 1880	6 0 20
8	Nov. 14, 1826	July 24, 1830	3 8 10	22	April 29, 1880	Nov. 18, 1885	5 6 20
				23	Jan. 12, 1886	June 25, 1886	0 5 5
	WILLIAM IV.			24	Aug. 5, 1886	June 28, 1892	5 10 24
9	Oct. 26, 1830	April 22, 1831	0 5 27	25	Aug. 4, 1892	July 24, 1895	2 11 20
10	June 14, 1831	Dec. 3, 1332	1 5 9	26	Aug. 12, 1895		
11	Jan. 29, 1833	Dec. 30, 1834	1 11 1				
12	Feb. 19, 1835	July 17, 1837	2 4 28				

* Parliament first met after the Union with Ireland, January 22, 1801.

LIST OF ADMINISTRATIONS IN THE PRESENT CENTURY.

Date.	Prime Minister.	Duration.	Chancellor.	Exchequer.	Home Secretary.	Foreign Sec.
		Yrs. Dys.				
Dec. 23, 1783	William Pitt	17 84	Thurlow .. Loughboro'	William Pitt ..	Portland	Grenville.
Mar. 17, 1801	Hy. Addington ..	3 59	Eldon	H. Addington..	Portland, Pelham, C. Yorke	Hawkesbury.
May 15, 1804	William Pitt	1 272	Eldon	William Pitt ..	Hawkesbury ..	Harrowby. Mulgrave.
Feb. 11, 1806	Lord Grenville ..	1 48	Erskine....	Lord H. Petty..	Spencer..	Chas. J. Fox. Visct. Howick.
Mar. 31, 1807	Duke of Portland.	2 246	Eldon	S. Perceval ..	Hawkesbury ..	G. Canning.
Dec. 2, 1809	Spencer Perceval.	2 190	Eldon	S. Perceval ..	R. Ryder	Bathurst. Wellesley.
June 9, 1812	Earl of Liverpool.	14 319	Eldon	N. Vansittart.. F. J. Robinson.	Sidmouth ..... Robert Peel	Castlereagh. G. Canning.
Apr. 24, 1827	George Canning..	0 134	Lyndhurst..	G. Canning ..	Sturges Bourne. Lansdowne	Dudley.
Sept. 5, 1827	Visct. Goderich ..	0 142	Lyndhurst..	J. C. Herries ..	Lansdowne	Dudley.
Jan. 25, 1828	D. of Wellington..	2 301	Lyndhurst..	H. Goulburn ..	Robert Peel....	Dudley. Aberdeen.
Nov. 22, 1830	Earl Grey.....	3 238	Brougham..	Althorp	Melbourne	Palmerston.
July 18, 1834	Visct. Melbourne.	0 161	Brougham..	Althorp	Duncannon	Palmerston.
Dec. 26, 1834	Sir Robert Peel ..	0 113	Lyndhurst..	Sir R. Peel....	H. Goulburn ..	Wellington.
Apr. 18, 1835	Visct. Melbourne.	6 141	In Comm... Cottenhpm.	T. S. Rice..... F. T. Barring....	Lord J. Russell .. Normanby.....	Palmerston.
Sept. 6, 1841	Sir Robert Peel ..	4 303	Lyndhurst..	H. Goulburn ..	Sir J. Graham..	Aberdeen.
July 6, 1846	Ld. John Russell.	5 236	Cottenham. Truro	Sir C. Wood ..	Sir George Grey	Palmerston. Granville.
Feb. 27, 1852	Earl of Derby	0 305	St Leonards	B. Disraeli	S. H. Walpole..	Malmesbury.
Dec. 28, 1852	Earl of Aberdeen.	2 44	Cranworth..	W. Gladstone..	Palmerston	Lord J. Russell. Clarendon.
Feb. 10, 1855	Lord Palmerston.	3 15	Cranworth..	W. Gladstone.. Sir G. C. Lewis.	Sir George Grey	Clarendon.
Feb. 25, 1858	Earl of Derby....	1 113	Chelmsford.	B. Disraeli	S. H. Walpole..	Malmesbury.
June18, 1859	Lord Palmerston.	6 141	Campbell .. Westbury ..	W. Gladstone..	Sir G. C. Lewis.. Sir George Grey	Russell.
Nov. 6, 1865	Earl Russell	0 242	Cranworth..	W. Gladstone..	Sir George Grey	Clarendon.
July 6, 1866	Earl of Derby....	1 236	Chelmsford.	B. Disraeli	S. H. Walpole .. GathorneHardy	Stanley.
Feb. 27, 1868	Benjamin Disraeli	0 285	Cairns	G. W. Hunt ..	G. Hardy	Stanley.
Dec. 9, 1868	W. E. Gladstone..	5 74	Hatherley.. Selborne ..	Robert Lowe .... W. E. Gladstone	H. A. Bruce ..... Robert Lowe	Clarendon. Granville.
Feb. 21, 1874	Benjamin Disraeli) Earl Beaconsfield.	6 67	Cairns	S. Northcote ..	R. A. Cross	Derby. Salisbury.
Apr. 28, 1880	W. E. Gladstone..	5 57	Selborne ..	W. Gladstone.. H.C.E. Childers	Sir W. Harcourt	Granville.
June24, 1885	Marq. of Salisbury	0 227	Halsbury ..	Hicks-Beach..	R. A. Cross	Salisbury.
Feb. 7, 1886	W. E. Gladstone..	0 139	Herschel ..	W. V. Harcourt	H. C. E. Childers	Rosebery.
July 24, 1886	Marq. of Salisbury	6 17	Halsbury ..	Lord Churchill G. J. Goschen..	H. Matthews ..	Iddesleigh. Salisbury.
Aug. 15, 1892	W. E. Gladstone..	2 313	Herschel ..	W. V. Harcourt	H. H. Asquith..	Rosebery.
Mar. 3, 1894	Earl of Rosebery..					Kimberley.
June24, 1895	Marq. of Salisbury		Halsbury ..	Hicks-Beach ..	Sir M. W. Ridley	Salisbury.

THE SALISBURY MINISTRY, 1895.

Prime Minister and Secretary of State for Foreign Affairs	Marquis of Salisbury.
Lord President of the Council	Duke of Devonshire.
First Lord of the Treasury	Rt. Hon. A. J. Balfour.
Lord Chancellor	Lord Halsbury.
Secretary for India	Lord G. Hamilton.
Chancellor of the Exchequer	Sir M. Hicks-Beach.
Home Secretary	Sir Matthew White Ridley.
Secretary for the Colonies	Rt. Hon. J. Chamberlain.
Secretary for War	Marquis of Lansdowne.
Secretary for Scotland	Lord Balfour of Burleigh.
First Lord of the Admiralty	Rt. Hon. G. J. Goschen.
President of the Board of Trade	Rt. Hon. C. T. Ritchie.
Chancellor of the Duchy of Lancaster	Lord James.
Lord Privy Seal	Viscount Cross.
President of the Local Government Board	Rt. Hon. Henry Chaplin.
Lord Lieutenant of Ireland	Earl Cadogan.
Lord Chancellor of Ireland	Lord Ashbourne.
President of the Board of Agriculture	Rt. Hon. W. Long.
First Commissioner of Works	Rt. Hon. Akers Douglas.

The above form the Cabinet.

Chief Secretary for Ireland	G. Balfour.
Postmaster-General	Duke of Norfolk.
Vice-President of the Council of Education	Sir John E. Gorst.
Junior Lords of the Treasury	H. T. Anstruther. W. Hayes Fisher. Lord Stanley.
Financial Secretary to the Treasury	Rt. Hon. R. W. Hanbury.
Patronage Secretary to the Treasury	Sir Wm. Walrond.
Under Secretary for the Home Department	Jesse Collings.
Under Secretary for Foreign Affairs	Hon. St. John Brodrick.
Under Secretary for the Colonies	Earl of Selborne.
Under Secretary for India	Earl of Onslow.
Parliamentary Secretary of the Board of Trade	Earl of Dudley.
Parliamentary Secretary of the Local Government Board	T. W. Russell.

THE SALISBURY MINISTRY, 1895—*continued.*

Secretary to the Admiralty	W. E. G. Macartney.
Under Secretary for the War Office	George Wyndham.
Financial Secretary to the War Office	J. Powell Williams.
Civil Lord to the Admiralty	Austen Chamberlain.
Attorney-General	Sir R. E. Webster.
Solicitor-General	Sir R. B. Finlay.
Lord Advocate for Scotland	Rt. Hon. A. G. Murray.
Solicitor-General for Scotland	C. Scott Dickson.
Attorney-General for Ireland	Rt. Hon. John Atkinson.
Solicitor-General for Ireland	Dunbar P. Barton.
Vice-Chamberlain of the Household	Hon. Alwyn Fellowes.
Comptroller of the Household	Lord Valentia.
Lord Chamberlain	Lord Hopetoun.

PRIME MINISTERS SINCE 1834.

Sir Robert Peel	December 15, 1834
Viscount Melbourne	April 18, 1835
Sir Robert Peel	August 31, 1841
Lord John Russell	July 6, 1846
Earl of Derby	February 27, 1852
Earl of Aberdeen	December 28, 1852
Viscount Palmerston	February 26, 1855
Earl of Derby	February 26, 1858
Viscount Palmerston	June 18, 1859
Earl Russell	October 28, 1865
Earl of Derby	July 8, 1866
Mr. Disraeli	March to December, 1868
Mr. Gladstone	December 9, 1868
Earl Beaconsfield	February 21, 1874
Mr. Gladstone	April 29, 1880 and Ch. of Ex. to April, 1883.
Marquis of Salisbury	June 24, 1885
Mr. Gladstone	February 2, 1886
Marquis of Salisbury	August 3, 1886
Mr. Gladstone	August 15, 1892
Earl Rosebery	March 3, 1894
Marquis of Salisbury	June 25, 1895

Twenty changes of Governments have taken place since the beginning of 1834, but in that time only ten men have been Premiers, and of these the Marquis of Salisbury and Earl Rosebery are the sole survivors. Mr. Gladstone had been Premier longer than any other statesman since the Earl of Liverpool, who held office nearly fifteen years in succession.

In 1885 the number of members of the Lower House was finally fixed at 670, as against 658 in previous years; England returning 465, Wales 30, Scotland 72, and Ireland 103 members. The previous distribution had been—England 469, Wales 30, Scotland 60, and Ireland 103 seats. There are now 377 county members, as against 283; 284 borough members, as against 360; and 9 University members, as against 9.

THE

HOUSE OF COMMONS AS ELECTED JULY, 1895.

WITH CORRECTIONS TO NOVEMBER 25TH, 1899.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
BEDFORD (3).							
County Divisions (2).							
Biggleswade, or N.	Lord A. Compton	..	..	1	..	..	64,457
Luton, or S.	T. G. Ashton	..	1	..	..	..	68,249
		..	1	1	..	..	132,706
Borough (1).							
Bedford	G. Pym	1	..	..	..	..	28,023
		1	1	1	..	..	160,729
BERKS. (5).							
County Divisions (3).							
Abingdon, or N.	A. K. Lloyd	1	..	..	..	..	49,077
Newbury, or S.	W. G. Mount	1	..	..	..	..	55,846
Wokingham, or E.	Captain Oliver Young	1	..	..	..	..	59,104
		3	..	..	..	..	164,027
Boroughs (2).							
Reading	G. W. Palmer	..	1	..	..	..	55,752
Windsor (New)	F. T. Barry	1	..	..	..	..	12,327
		4	1	..	..	..	232,106
BUCKS. (3).							
County Divisions (3).							
Aylesbury, or M.	Hon. Lionel Rothschild	..	..	1	..	..	58,510
Buckingham, or N.	W. W. Carlile	1	..	..	..	..	57,389
Wycombe, or S.	Viscount Curzon	1	..	..	..	..	66,792
		2	..	1	..	..	182,691
CAMBRIDGE (4).							
County Divisions (3).							
Chesterton, or W.	R. Green	1	..	..	..	..	46,041
Newmarket, or E.	H. Mc.Calmont	1	..	..	..	..	48,878
Wisbech, or N.	C. T. Giles	1	..	..	..	..	49,556
		3	..	..	..	..	144,475
Borough (1).							
Cambridge	R. U. P. Fitzgerald	1	..	..	..	..	44,387
		4	..	..	..	..	188,862

HOUSE OF COMMONS.

Constituencies.	Members.	Politics. Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	Parliamentary Population, 1891.
CHESTER (13).							
County Divisions (8).							
Altrincham	C. R. Disraeli	1	..	..	..	..	63,390
Crewe	Hon. R. A. Ward	1	..	..	..	..	64,434
Eddisbury	H. J. Tollemache	1	..	..	..	..	55,249
Hyde	J. W. Sidebotham	1	..	..	..	..	57,468
Knutsford	Hon. A. de T. Egerton	1	..	..	..	..	55,073
Macclesfield	W. Bromley-Davenport	1	..	..	..	..	53,147
Northwich	Sir J. T. Brunner	..	1	..	..	..	69,893
Wirrall	Colonel Cotton-Jodrell	1	..	..	..	..	73,725
		7	1	..	..	..	492,379
Boroughs (5).							
Birkenhead	Elliot Lees	1	..	..	..	..	99,249
Chester	R. A. Yerburgh	1	..	..	..	..	42,295
Stalybridge	T. H. Sidebotham	1	..	..	..	..	44,135
Stockport (2)	G. Whiteley	1	..	..	..	..	70,253
	B. V. Melville	1	..	..	..	..	
		12	1	..	..	..	748,311
CORNWALL (7).							
County Divisions (6).							
Bodmin, or S.E.	Rt. Hon. L. H. Courtney	..	..	1	..	..	52,386
Camborne, or N.W.	A. Strauss	..	..	1	..	..	54,192
Launceston, or N.E.	F. Moulton	..	1	..	..	..	48,086
St. Austell, or M.	W. A. Mc.Arthur	..	1	..	..	..	49,517
St. Ives, or W.	T. B. Bolitho	..	..	1	..	..	50,160
Truro	E. Lawrence	..	..	1	..	..	50,715
		..	2	4	..	..	305,056
Borough (1).							
Penryn and Falmouth	F. J. Horniman	..	1	..	..	..	17,533
		..	3	4	....	..	322,589
CUMBERLAND (6).							
County Divisions (4).							
Cockermouth	Sir Wilfrid Lawson	..	1	..	..	..	63,592
Egremont, or W.	H. Duncombe	1	..	..	..	..	53,629
Eskdale, or N.	R. A. Allison	..	1	..	..	..	45,300
Penrith, or M.	J. W. Lowther	1	..	..	..	..	45,636
		2	2	..	..	..	208,157
Boroughs (2).							
Carlisle	*W. C. Gully, Q.C.	..	..	..	..	..	39,176
Whitehaven	A. Helder	1	..	..	..	..	19,217
		3	2	..	..	..	266,550

* Speaker.

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
DERBY (9).							
County Divisions (7).							
Chesterfield	T. Bayley	..	1	..	..	..	61,294
High Peak	Major Sidebotham	1	..	..	..	..	60,740
Ilkeston	Sir W. B. Foster	..	1	..	..	..	69,192
Mid	J. A. Jacoby	..	1	..	..	..	59,716
North-Eastern	T. D. Bolton	..	1	..	..	..	61,995
Southern	J. Gretton	1	..	..	..	..	63,816
Western	V. C. Cavendish	..	..	1	..	..	56,987
		2	4	1	..	..	433,740
Boroughs (2).							
Derby (2)	H. Bemrose	1	..	..	..	..	94,146
	G. Drage	1	..	..	..	..	
		4	4	1	..	..	527,886
DEVON (13).							
County Divisions (8).							
Ashburton, or M.	C. Seale Hayne	..	1	..	..	..	53,005
Barnstaple, or N.W.	Sir W. C. Gull	..	..	1	..	..	61,349
Honiton, or E.	Sir J. Kennaway	1	..	..	..	..	52,025
South Molton, or N.	G. Lambert	..	1	..	..	..	46,718
Tavistock, or W.	H. C. F. Luttrell	..	1	..	..	..	50,715
Tiverton, or N.E.	Sir W. Walrond	1	..	..	..	..	52,762
Torquay	Commander Philpotts	1	..	..	..	..	57,463
Totnes, or S.	F. B. Mildmay	..	..	1	..	..	49,615
		3	3	2	..	..	423,652
Boroughs (5).							
Devonport (2)	Hudson Kearley	..	1	..	..	..	70,238
	E. J. C. Morton	..	1	..	..	..	
Exeter	Sir E. Vincent	1	..	..	..	..	50,570
Plymouth (2)	Sir E. Clarke	1	..	..	..	..	87,307
	F. S. Mendl	..	1	..	..	..	
		5	6	2	..	..	631,767
DORSET (4).							
County Divisions (4).							
Eastern	Hon. H. N. Sturt	1	..	..	..	..	57,202
Northern	J. K. Wingfield Digby	1	..	..	..	..	45,740
Southern	W. E. Brymer	1	..	..	..	..	49,897
Western	Lieut.-Colonel R. Williams	1	..	..	..	..	41,648
		4	..	..	..	..	194,487

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
DURHAM (16).							
County Divisions (8).							
Barnard Castle	Sir J. W. Pease	..	1	..	..	..	59,459
Bishop Auckland	J. M. Paulton	..	1	..	..	..	61,833
Chester-le-Street	Sir J. Joicey, Bt.	..	1	..	..	..	70,206
Houghton-le-Spring	R. Cameron	..	1	..	..	..	69,235
Jarrow	Sir C. M. Palmer	..	1	..	..	..	80,532
Mid	J. Wilson	..	1	..	..	..	67,635
North-Western	L. Atherley-Jones	..	1	..	..	..	65,987
South-Eastern	Joseph Richardson	..	1	..	..	..	63,830
		..	8	..	..	..	538,717
Boroughs (8).							
Darlington	Pike Pease	..	..	1	..	..	38,030
Durham	Hon. A. R. D. Elliot	..	..	1	..	..	15,287
Gateshead	William Allan	..	1	..	..	..	85,712
Hartlepool	Sir T. Richardson	..	..	1	..	..	64,914
South Shields	W. S. Robson	..	1	..	..	..	78,431
Stockton	J. Samuel	..	1	..	..	..	68,895
Sunderland (2)	W. T. Doxford	1	..	..	..	..	142,097
	Colonel Gourley	..	1	..	..	..	
		1	12	3	..	..	1,032,083
ESSEX (11).							
County Divisions (8).							
Chelmsford, or M.	T. Usborne	1	..	..	..	..	58,313
Epping, or W.	Colonel A. R. M. Lockwood	1	..	..	..	..	55,416
Harwich, or N.E.	J. Round	1	..	..	..	..	55,612
Maldon, or E.	Hon. C. H. Strutt	1	..	..	..	..	54,572
Romford, or S.	L. Sinclair	1	..	..	..	..	103,543
Saffron Walden, or N.	C. Gold	..	1	..	..	..	47,422
South-Eastern	Major Rasch	1	..	..	..	..	69,824
Walthamstow, or S.W.	S. Woods	..	1	..	..	..	101,236
		6	2	..	..	..	545,938
Boroughs (3).							
Colchester	Sir W. D. Pearson	..	1	..	..	..	34,559
West Ham, North	E. Gray	1	..	..	..	..	92,304
„ South	Major G. E. Banes	1	..	..	..	..	112,598
		8	3	..	..	..	785,399
GLOUCESTER (11).							
County Divisions (5).							
Cirencester, or E.	Hon. A. B. Bathurst	1	..	..	..	..	53,364
Forest of Dean	Rt. Hon. Sir C. Dilke	..	1	..	..	..	52,791
Stroud, or M.	C. A. Cripps	1	..	..	..	..	56,488
Tewkesbury, or N.	Sir J. E. Dorington	1	..	..	..	..	50,325
Thornbury, or S.	C. E. H. A. Colston	1	..	..	..	..	63,587
		4	1	..	..	..	276,555

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
GLOUCESTER—*con.*							
Boroughs (6).							
Bristol, East	Sir W. H. Wills, Bt.	..	1	..	..	..	70,685
„ North	L. Fry	..	..	1	..	..	77,172
„ South	Col. Sir Edward Hill	1	..	..	..	..	72,273
„ West	Sir M. Hicks-Beach	1	..	..	..	..	65,481
Cheltenham	Colonel Russell	1	..	..	..	..	49,775
Gloucester	C. J. Monk	..	..	1	..	..	39,444
		7	2	2	..	..	651,385
HANTS (12).							
County Divisions (6).							
Andover, or W.	W. W. B. Beach	1	..	..	..	..	51,225
Basingstoke, or N.	A. F. Jeffreys	1	..	..	..	..	70,497
Fareham, or S.	Lt.-Gen. Sir F. Fitzwygram	1	..	..	..	..	65,987
Isle of Wight	Sir R. Webster	1	..	..	..	..	78,718
New Forest	Hon. J. Scott Montagu	1	..	..	..	..	51,300
Petersfield, or E.	W. Nicholson	1	..	..	..	..	47,165
		6	..	..	..	..	364,892
Boroughs (6).							
Christchurch	Abel H. Smith	1	..	..	..	..	53,270
Portsmouth (2)	Sir John Baker	..	1	..	..	..	159,255
	W. O. Clough	..	1	..	..	..	
Southampton	Sir F. Evans	..	1	..	..	..	93,596
	Sir J. B. Simeon	..	..	1	..	..	
Winchester	W. H. Myers	1	..	..	..	..	19,073
		8	3	1	..	..	690,086
HEREFORD (3).							
County Divisions (2).							
Leominster, or N.	Sir J. J. Rankin, Bt.	1	..	..	..	..	45,830
Ross, or S.	M. Biddulph	..	..	1	..	..	49,889
		1	..	1	..	..	95,719
Borough (1).							
Hereford	C. W. R. Cooke	1	..	..	..	..	20,267
		2	..	1	..	..	115,986
HERTFORD (4).							
County Divisions (4).							
Hertford, or E.	E. Cecil	1	..	..	..	..	54,571
Hitchin, or N.	G. B. Hudson	1	..	..	..	..	48,437
St. Albans, or M.	Hon. Vicary Gibbs	1	..	..	..	..	53,239
Watford, or W.	T. F. Halsey	1	..	..	..	..	63,878
		4	..	..	..	..	220,125

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
HUNTINGDON (2).							
County Divisions (2).							
Huntingdon, or S.	A. H. Smith-Barry	1	..	..	..	..	25,422
Ramsey, or N.....	Hon. A. E. Fellowes	1	..	..	..	..	29,558
KENT (19).		2	..	..	..	..	54,980
County Divisions (8).							
Ashford, or S.	L. Hardy	1	..	..	..	..	67,946
Dartford, or N.W.	Rt. Hon. Sir W. Hart-Dyke	1	..	..	..	..	79,850
Faversham, or N.E. ..	F. G. Barnes.....	1	..	..	..	..	69,343
Isle of Thanet.....	Rt. Hon. J. Lowther	1	..	..	..	..	61,617
Medway, or M.	Col. C. E. Warde	1	..	..	..	..	64,178
Sevenoaks, or W.	H. W. Forster	1	..	..	..	..	80,062
St. Augustine's, or E...	Rt. Hon. A. Akers-Douglas	1	..	..	..	..	68,011
Tunbridge, or S.W.....	A. Griffith Boscawen	1	..	..	..	..	72,596
Boroughs (11).		8	..	..	..	..	563,603
Canterbury	J. Henniker-Heaton	1	..	..	..	..	22,607
Chatham	H. D. Davies	1	..	..	..	..	59,389
Deptford	A. H. A. Morton	1	..	..	..	..	101,326
Dover	G. Wyndham	1	..	..	..	..	33,313
Gravesend	J. H. Dudley Ryder	1	..	..	..	..	35,492
Greenwich	Lord H. Cecil	1	..	..	..	..	78,131
Hythe	Sir E. A. Sassoon.....	1	..	..	..	..	35,540
Lewisham	J. Penn	1	..	..	..	..	88,643
Maidstone	F. S. W. Cornwallis	1	..	..	..	..	32,145
Rochester.....	Viscount Cranborne	1	..	..	..	..	26,170
Woolwich	Colonel E. Hughes	1	..	..	..	..	98,976
LANCASTER (57).		19	..	..	..	..	1,175,335
County Divisions (23).							
Northern Part (4).							
Blackpool	Sir M. W. Ridley.....	1	..	..	..	..	70,356
Chorley.....	Lord Balcarres.....	1	..	..	..	..	67,854
Lancaster.....	Colonel Foster	1	..	..	..	..	64,279
North Lonsdale	R. Cavendish	..	..	1	..	..	51,181
N.-Eastern Part (4).							
Accrington	Sir J. F. Leese, Q.C.	..	1	..	..	..	75,712
Clitheroe	Sir U. Kay-Shuttleworth ..	..	1	..	..	..	89,331
Darwen.....	J. Rutherford	1	..	..	..	..	70,475
Rossendale	J. H. Maden	..	1	..	..	..	70,567
S.-Eastern Part (8).							
Eccles	O. L. Clare	1	..	..	..	..	78,133
Gorton	E. F. G. Hatch	1	..	..	..	..	77,690
Heywood	G. Kemp	..	..	1	..	..	56,794
Middleton	J. Duckworth	..	1	..	..	..	68,540
Prestwich.....	F. Cawley	..	1	..	..	..	79,497
Radcliffe-c'm-Farnw'th	Colonel Mellor	1	..	..	..	..	72,940
Stretford	Sir J. W. Maclure, Bt.	1	..	..	..	..	67,004
Westhoughton	Lord Stanley	1	..	..	..	..	83,063

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
LANCASTER—*con.*							
S.-Western Part (7).							
Bootle	Colonel Sandys	1	..	..	..	..	97,552
Ince	Colonel Blundell	1	..	..	..	..	67,021
Leigh	C. P. Scott	..	1	..	..	..	65,155
Newton	Colonel Pilkington	1	..	..	..	..	63,296
Ormskirk	Hon. A. Stanley	1	..	..	..	..	64,096
Southport	Sir G. Pilkington	..	1	..	..	..	76,581
Widnes	J. S. Gilliat	1	..	..	..	..	64,507
		14	7	2	..	..	1,641,624
Boroughs (34).							
Ashton-under-Lyne	H. Whiteley	1	..	..	..	..	47,322
Barrow-in-Furness	Sir C. W. Cayzer	1	..	..	..	..	51,712
Blackburn (2)	W. H. Hornby	1	..	..	..	..	120,064
	Sir W. Coddington	1	..	..	..	..	
Bolton (2)	H. Shepherd Cross	1	..	..	..	..	118,730
	G. Harwood	..	1	..	..	..	
Burnley	Rt. Hon. P. Stanhope	..	1	..	..	..	86,163
Bury	J. Kenyon	1	..	..	..	..	55,491
Liverpool, Abercromby	W. F. Lawrence	1	..	..	..	..	55,564
„ East Toxteth	A. F. Warr	1	..	..	..	..	63,926
„ Everton	Sir J. A. Willox	1	..	..	..	..	78,639
„ Exchange	C. M. Mc.Arthur	..	..	1	..	..	47,704
„ Kirkdale	David MacIver	1	..	..	..	..	77,018
„ Scotland	T. P. O'Connor	..	..	..	1	..	53,723
„ Walton	J. H. Stock	1	..	..	..	..	66,465
„ West Derby	Rt. Hon. W. H. Long	1	..	..	..	..	76,971
„ West Toxteth	R. P. Houston	1	..	..	..	..	64,461
Manchester, East	Rt. Hon. A. J. Balfour	1	..	..	..	..	85,407
„ North	C. E. Schwann	..	1	..	..	..	76,629
„ N'th-East	Rt. Hon. Sir J. Fergusson	1	..	..	..	..	72,794
„ N'th-West	Sir W. H. Houldsworth	1	..	..	..	..	67,633
„ South	Marquis of Lorne	..	..	1	..	..	80,051
„ S'th-West	W. J. Galloway	1	..	..	..	..	71,968
Oldham (2)	A. Emmott	..	1	..	..	..	183,871
	W. Runciman	..	1	..	..	..	
Preston (2)	R. W. Hanbury	1	..	..	..	..	111,696
	W. E. M. Tomlinson	1	..	..	..	..	
Rochdale	C. M. Royds	1	..	..	..	..	71,458
Salford, North	F. Platt-Higgins	1	..	..	..	..	61,520
„ South	Sir H. H. Howorth	1	..	..	..	..	68,879
„ West	Lees Knowles	1	..	..	..	..	67,740
St. Helens	H. Seton-Karr	1	..	..	..	..	71,288
Warrington	R. Pierpoint	1	..	..	..	..	55,349
Wigan	Sir F. S. Powell	1	..	..	..	..	55,013
		40	12	4	1	..	3,906,873

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
LEICESTER (6).							
County Divisions (4).							
Bosworth, or W.	C. B. Mc.Laren	..	1	..	..	..	57,240
Harborough, or S.	J. W. Logan	..	1	..	..	..	59,368
Loughborough, or M.	J. E. Johnson-Ferguson	..	1	..	..	..	55,164
Melton, or E.	Lord E. Manners	1	..	..	..	..	59,852
		1	3	..	..	..	231,624
Boroughs (2).							
Leicester (2)	H. Broadhurst	..	1	..	..	..	142,051
	Walter Hazell	..	1	..	..	..	
		1	5	..	..	..	373,675
LINCOLN (11).							
County Divisions (7).							
Brigg, or N. Lindsey	H. J. Reckitt	..	1	..	..	..	49,151
Gainsboro', or W. L'sey	E. Bainbridge	..	1	..	..	..	49,595
Horncastle, or S. L'sey.	Lord Willoughby de Eresby.	1	..	..	..	..	46,079
Louth, or E. Lindsey	R. W. Perks	..	1	..	..	..	46,868
Sleaford, or N. Kesteven	Rt. Hon. H. Chaplin	1	..	..	..	..	45,474
Spalding, or Holland	H. F. Pollock	..	..	1	..	..	49,279
Stamford, or S. Kestev'n	W. Younger	1	..	..	..	..	47,647
		3	3	1	..	..	334,093
Boroughs (4).							
Boston	W. Garfitt	1	..	..	..	..	18,927
Grantham	H. Y. B. Lopes	1	..	..	..	..	17,170
Great Grimsby	George Doughty	..	..	1	..	..	58,603
Lincoln	C. H. Seeley	..	..	1	..	..	43,985
		5	3	3	..	..	472,778
MIDDLESEX (47).							
County Divisions (7).							
Brentford	J. Bigwood	1	..	..	..	..	69,792
Ealing	Rt. Hon. Lord G. Hamilton.	1	..	..	..	..	70,756
Enfield	Captain H. F. Bowles	1	..	..	..	..	84,388
Harrow	Irwin Cox	1	..	..	..	..	96,720
Hornsey	H. C. Stephens	1	..	..	..	..	78,043
Tottenham	Joseph Howard	1	..	..	..	..	97,166
Uxbridge	Sir F. D. Dixon Hartland, Bt.	1	..	..	..	..	67,754
		7	..	..	..	..	564,619
Boroughs (40).							
Bethnal Green, N.E.	M. M. Bhownaggree	1	..	..	..	..	66,804
,, ,, S.W.	E. H. Pickersgill	..	1	..	..	..	62,330
Chelsea	C. A. Whitmore	1	..	..	..	..	96,272
City of London (2)	Sir R. Hanson	1	..	..	..	..	37,694
	A. G. H. Gibbs	1	..	..	..	..	
Finsbury, Central	M. Mainwaring	1	..	..	..	..	65,885

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
MIDDLESEX—*con.*							
Finsbury, East	H. C. Richards	1	..	..	..	..	45,306
Fulham	W. H. Fisher	1	..	..	..	..	91,640
Hackney, Central	Sir A. Scoble, Q.C.	1	..	..	..	..	64,760
„ North	W. R. Bousfield, Q.C.	1	..	..	..	..	77,170
„ South	T. H. Robertson	1	..	..	..	..	87,601
Hammersmith	General Goldsworthy	1	..	..	..	..	97,237
Hampstead	E. Broadie-Hoare	1	..	..	..	..	68,425
Holborn	Sir Charles Hall, Q.C.	1	..	..	..	..	70,918
Islington, East	B. L. Cohen	1	..	..	..	..	83,883
„ North	G. C. T. Bartley	1	..	..	..	..	90,272
„ South	Sir Albert Rollit	1	..	..	..	..	71,910
„ West	T. Lough	..	1	..	..	..	73,368
Kensington, North	W. T. Sharpe	1	..	..	..	..	82,656
„ South	Lord Warkworth	1	..	..	..	..	83,665
Marylebone, East	E. Boulnois	1	..	..	..	..	66,673
„ West	Sir Samuel Scott	..	..	1	..	..	75,708
Paddington, North	John Aird	1	..	..	..	..	64,671
„ South	T. G. Fardell	1	..	..	..	..	53,167
Shoreditch, Haggerston	J. Lowles	1	..	..	..	..	56,356
„ Hoxton	Alderman James Stuart	..	1	..	..	..	67,653
St. George's, Hn'vr-sq.	Rt. Hon. G. J. Goschen	..	..	1	..	..	78,362
St. Pancras, East	T. Wrightson	1	..	..	..	..	60,844
„ North	E. R. Moon	1	..	..	..	..	59,126
„ South	Capt. H. M. Jessel	..	..	1	..	..	53,767
„ West	H. R. Graham	1	..	..	..	..	60,700
Strand	Hon. W. F. D. Smith	1	..	..	..	..	64,674
Tower Hamlets:							
Bow and Bromley	W. M. Guthrie	1	..	..	..	..	88,645
Limehouse	H. S. Samuel	1	..	..	..	..	55,232
Mile End	Spencer Charrington	1	..	..	..	..	48,850
Poplar	Sidney Buxton	..	1	..	..	..	78,052
St. George	H. H. Marks	1	..	..	..	..	47,913
Stepney	W. C. Steadman	..	1	..	..	..	58,715
Whitechapel	Sir Samuel Montagu	..	1	..	..	..	74,420
Westminster	W. Burdett-Coutts	1	..	..	..	..	55,760
		38	6	3	..	..	3,251,703
MONMOUTH (4).							
County Divisions (*3*).							
Northern	R. Mc.Kenna	..	1	..	..	..	62,690
Southern	Hon. F. C. Morgan	1	..	..	..	..	66,133
Western	Sir W. V. Harcourt	..	1	..	..	..	64,695
Borough (*1*).		1	2	..	..	..	193,518
Monmouth Group	Albert Spicer	..	1	..	..	..	58,742
		1	3	..	..	..	252,260

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
NORFOLK (10).							
County Divisions (6).							
Eastern	R. J. Price	..	1	..	..	..	40,693
Midland	F. W. Wilson	..	1	..	..	..	49,604
Northern	Sir W. B. Gurdon	..	1	..	..	..	51,072
North-Western	Joseph Arch	..	1	..	..	..	51,278
Southern	A. W. Soames	..	1	..	..	..	49,730
South-Western	T. L. Hare	1	..	..	..	..	47,133
Boroughs (4).		1	5	..	..	..	289,510
Great Yarmouth	Sir J. C. Colomb	1	..	..	..	..	49,318
King's Lynn	T. Gibson Bowles	1	..	..	..	..	18,265
Norwich (2)	S. Hoare	1	..	..	..	..	100,970
	Sir H. Bullard	1	..	..	..	..	
		5	5	..	..	..	458,063
NORTHAMPTON (7).							
County Divisions (4).							
Eastern	F. A. Channing	..	1	..	..	..	65,499
Mid	Sir J. Pender, Bart.	1	..	..	..	..	48,790
Northern	E. P. Monckton	1	..	..	..	..	46,723
Southern	Hon. E. Douglas Pennant	1	..	..	..	..	46,628
Boroughs (3).		3	1	..	..	..	207,640
Northampton (2)	H. Labouchere	..	1	..	..	..	70,872
	C. G. A. Drucker	1	..	..	..	..	
Peterborough	R. Purvis	..	..	1	..	..	26,464
		4	2	1	..	..	304,976
N'RTH'MB'RL'ND (8).							
County Divisions (4).							
Berwick-on-Tweed	Sir Edward Grey, Bart.	..	1	..	..	..	52,442
Hexham	W. C. B. Beaumont	..	1	..	..	..	51,587
Tyneside	J. A. Pease	..	1	..	..	..	69,642
Wansbeck	C. Fenwick	..	1	..	..	..	59,701
Boroughs (4).		..	4	..	..	..	233,372
Morpeth	Thomas Burt	..	1	..	..	..	40,133
Newcastle-on-T'ne (2)	Sir C. F. Hamond	1	..	..	..	..	186,324
	W. D. Cruddas	1	..	..	..	..	
Tynemouth	R. S. Donkin	1	..	..	..	..	46,267
NOTTINGHAM (7).		3	5	..	..	..	506,096
County Divisions (4).							
Bassetlaw	Sir F. Milner	1	..	..	..	..	51,452
Mansfield	J. C. Williams	..	1	..	..	..	65,790
Newark	Lord Newark	1	..	..	..	..	50,035
Rushcliffe	J. E. Ellis	..	1	..	..	..	66,617
		2	2	..	..	..	233,894

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
NOTTINGHAM—*con.*							
Boroughs (3).							
Nottingham, East	E. Bond.....	1	..	..	..	..	69,181
,, South ..	Lord H. Bentinck	1	..	..	..	..	60,487
,, West....	J. H. Yoxall	..	1	..	..	..	82,037
		4	3	..	..	..	445,599
OXFORD (4).							
County Divisions (3).							
Banbury, or N.	A. Brassey	1	..	..	..	..	43,861
Henley, or S.	R. Hermon Hodge	1	..	..	..	..	48,145
Woodstock, or M.	G. H. Morrell	1	..	..	..	..	50,464
		3	..	..	..	..	142,470
Borough (1).							
Oxford	Viscount Valentia	1	..	..	..	..	45,741
		4	..	..	..	..	188,211
RUTLAND (1).							
County Division (1).							
Rutland	G. H. Finch	1	..	..	..	..	20,659
SALOP (5).							
County Divisions (4).							
Ludlow, or S.	R. J. More.....	..	..	1	..	..	55,920
Newport, or N.	Colonel Kenyon Slaney	1	..	..	..	..	53,035
Oswestry, or W.	Stanley Leighton.....	1	..	..	..	..	54,178
Wellington, or M.	A. H. Brown	..	..	1	..	..	46,224
		2	..	2	..	..	209,357
Borough (1).							
Shrewsbury	H. D. Greene, Q.C.	1	..	..	..	..	26,967
		3	..	2	..	..	236,324
SOMERSET (10).							
County Divisions (7).							
Bridgwater	E. J. Stanley	1	..	..	..	..	48,226
Eastern	H. Hobhouse	..	..	1	..	..	50,152
Frome	J. E. Barlow	..	1	..	..	..	53,552
Northern	E. H. Llewellyn	1	..	..	..	..	53,418
Southern	Edward Strachey	..	1	..	..	..	51,300
Wellington, or W.	Sir A. Acland-Hood, Bart...	1	..	..	..	..	48,122
Wells.....	Hon. G. H. Jolliffe	1	..	..	..	..	55,569
		4	2	1	..	..	360,339
Boroughs (3).							
Bath (2).....	Colonel Wyndham Murray..	1	..	..	..	..	54,550
	E. R. Wodehouse.....	..	..	1	..	..	
Taunton	Lieut.-Colonel Welby.....	1	..	..	..	..	18,026
		6	2	2	..	..	432,915

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
STAFFORD (17).							
County Divisions (7).							
Burton	Sidney Evershed	..	1	..	..	..	58,640
Handsworth	Sir H. Meysey Thompson	..	..	1	..	..	84,782
Kingswinford	Rt. Hon. A. Staveley Hill	1	..	..	..	..	47,665
Leek	Charles Bill	1	..	..	..	..	56,711
Lichfield	Thos. Courtenay Warner	..	1	..	..	..	52,006
North-Western	James Heath	1	..	..	..	..	63,166
Western	Alex. Henderson	..	..	1	..	..	56,546
		3	2	2	..	..	419,516
Boroughs (10).							
Hanley	W. Woodall	..	1	..	..	..	86,845
Newcastle-under-Lyme	W. Allen	..	1	..	..	..	54,184
Stafford	C. E. Shaw	..	1	..	..	..	20,270
Stoke-on-Trent	D. H. Coghill	..	..	1	..	..	75,352
Walsall	S. Gedge	1	..	..	..	..	71,791
Wednesbury	W D. Green	1	..	..	..	..	69,083
West Bromwich	J. Ernest Spencer	1	..	..	..	..	59,489
Wolverhampton, E.	Rt. Hon. Sir H. H. Fowler	..	1	..	..	..	54,511
„ S.	J. L. Gibbons	..	..	1	..	..	57,096
„ W.	Sir A. Hickman	1	..	..	..	..	62,718
		7	6	4	..	..	1,030,855
SUFFOLK (8).							
County Divisions (5).							
Eye, or N.E.	F S. Stephenson	..	1	..	..	..	54,825
Lowestoft, or N.	H. S. Foster	1	..	..	..	..	61,654
Stowmarket, or N.W.	I. Malcolm	1	..	..	..	..	55,099
Sudbury, or S.	Sir W. Cuthbert Quilter, Bt.	..	..	1	..	..	55,655
Woodbridge, or S.E.	Captain Pretyman	1	..	..	..	..	56,539
		3	1	1	..	..	283,772
Boroughs (3).							
Bury St. Edmunds	Viscount Chelsea	1	..	..	..	..	16,630
Ipswich (2)	D. F. Goddard	..	1	..	..	..	57,360
	Sir C. Dalrymple	1	..	..	..	..	
		5	2	1	..	..	357,762
SURREY (22).							
County Divisions (6).							
Chertsey, or N.W.	H. C. Leigh-Bennet	1	..	..	..	..	61,968
Epsom, or M.	W. Keswick	1	..	..	..	..	70,103
Guildford, or S.W.	Rt. Hon. St. John Brodrick	1	..	..	..	..	67,722
Kingston	T. S. Cox	1	..	..	..	..	85,367
Reigate, or S.E.	Hon. H. Cubitt	1	..	..	..	..	64,453
Wimbledon, or N.E.	Cosmo Bonsor	1	..	..	..	..	69,236
		6	..	..	..	..	418,849

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
SURREY—*con.*							
Boroughs (16).							
Battersea	John Burns	..	1	..	..	..	97,204
Camberwell, Dulwich	Sir J. Blundell Maple	1	..	..	..	..	83,272
„ North	Major Dalbiac	1	..	..	..	..	88,932
„ Peckham	F. G. Banbury	1	..	..	..	..	83,482
Clapham	P. M. Thornton	1	..	..	..	..	96,952
Croydon	C. T. Ritchie	1	..	..	..	..	102,697
Lambeth, Brixton	Hon. E. Hubbard	1	..	..	..	..	70,356
„ Kennington	F. L. Cook	1	..	..	..	..	73,919
„ North	H. M. Stanley	..	..	1	..	..	62,516
„ Norwood	C. E. Tritton	1	..	..	..	..	68,411
Newington, Walworth	J. Bailey	1	..	..	..	..	59,040
„ West	Captain Cecil Norton	..	1	..	..	..	56,623
Southwark, Bermondsy	A. Lafone	1	..	..	..	..	82,898
„ Rotherhithe	J. C. Macdona	1	..	..	..	..	73,662
„ West	R. K. Causton	..	1	..	..	..	66,770
Wandsworth	H. Kimber	1	..	..	..	..	113,233
		18	3	1	..	..	1,698,816
SUSSEX (9).							
County Divisions (6).							
Chichester, or S.W.	Lord Edmund Talbot	1	..	..	..	..	54,357
Eastbourne, or S.	Admiral E. Field	1	..	..	..	..	66,468
East Grinstead, or N.	G. J. Goschen, jun.	1	..	..	..	..	52,525
Horsham, or N.W.	J. H. Johnstone	1	..	..	..	..	52,977
Lewes, or M.	Sir H. Fletcher	1	..	..	..	..	64,026
Rye, or E.	A. M. Brookfield	1	..	..	..	..	57,090
		6	..	..	..	..	347,443
Boroughs (3).							
Brighton (2)	G. W. E. Loder	1	..	..	..	..	142,121
	Bruce Wentworth	1	..	..	..	..	
Hastings	W. L. Shadwell	1	..	..	..	..	60,878
		9	..	..	..	..	550,442
WARWICK (14).							
County Divisions (4).							
Nuneaton, or N.E.	F. A. Newdigate	1	..	..	..	..	53,280
Rugby, or S.E.	Hon. R. G. Verney	1	..	..	..	..	49,130
Stratf'rd-on-A., or S.W.	Colonel Milward	1	..	..	..	..	46,440
Tamworth, or N.	P. A. Muntz	1	..	..	..	..	54,134
		4	..	..	..	..	202,984

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
WARWICK—*con.*							
Boroughs (*10*).							
Aston Manor	Captain Grice-Hutchinson ..	1	..	..	..	..	68,639
Birm'gham, Bordesley.	Jesse Collings	..	..	1	..	..	82,863
„ Central ..	E. Parkes	..	..	1	..	..	59,099
„ East	Sir B. Stone	1	..	..	..	..	65,683
„ Edgbaston	F. Lowe	1	..	..	..	..	67,682
„ North ...	J. T. Middlemore.....	..	..	1	..	..	62,948
„ South	J. Powell Williams	..	..	1	..	..	70,334
„ West	Rt. Hon. J. Chamberlain ..	..	..	1	..	..	69,508
Coventry	C. J. Murray.....	1	..	..	..	..	54,743
Warwick & Leamington	Hon. A. Lyttelton	..	..	1	..	..	39,102
		8	..	6	..	..	843,585
WESTMORLAND (2).							
County Divisions (*2*).							
Appleby, or N.	Sir Joseph Savory	1	..	..	..	..	31,176
Kendal, or S.	Captain J. F. Bagot.....	1	..	..	..	..	34,922
		2	..	..	..	..	66,098
WILTS (6).							
County Divisions (*5*).							
Chippenham, or N.W...	Sir J. D. Poynder	1	..	..	..	..	44,356
Cricklade, or N.	Lord Edmond Fitzmaurice..	..	1	..	..	..	59,414
Devizes, or E.	A. E. Goulding.....	1	..	..	..	..	48,267
Westbury, or W.....	Captain Chaloner	1	..	..	..	..	52,669
Wilton, or S.	Viscount Folkestone	1	..	..	..	..	42,901
		4	1	..	..	..	247,607
Borough (*1*).							
Salisbury	Mr. Allhusen.....	1	..	..	..	..	17,362
		5	1	..	..	..	264,969
WORCESTER (8).							
County Divisions (*5*).							
Bewdley, or W.	A. Baldwin	1	..	..	..	..	52,018
Droitwich, or M.	R. B. Martin	..	..	1	..	..	48,281
Eastern	J. A. Chamberlain	..	..	1	..	..	59,357
Evesham, or S.	Colonel C. W. Long.....	1	..	..	..	..	49,538
Northern	J. W. Wilson.....	..	..	1	..	..	58,437
		2	..	3	..	..	267,631
Boroughs (*3*).							
Dudley	Brooke Robinson.....	1	..	..	..	..	90,223
Kidderminster	Sir A. F. Godson, Q.C.	1	..	..	..	..	26,905
Worcester	Hon. G. H. Allsopp.....	1	..	..	..	..	42,899
		5	..	3	..	..	427,658

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
YORKSHIRE (52).							
County Divisions (26).							
East Riding:							
Buckrose	Sir A. Holden	..	1	..	..	..	50,676
Holderness	Commander Bethell	1	..	..	..	..	41,479
Howdenshire	Captain W. H. Wilson-Todd.	1	..	..	..	..	49,627
North Riding:							
Cleveland	A. E. Pease	..	1	..	..	..	55,917
Richmond	J. Hutton	1	..	..	..	..	54,450
Thirsk and Malton	J. G. Lawson	1	..	..	..	..	57,191
Whitby	E. W. Beckett	1	..	..	..	..	54,781
West Riding:							
Barkeston Ash	Colonel Gunter	1	..	..	..	..	48,470
Barnsley	J. Walton	..	1	..	..	..	78,844
Colne Valley	Sir J. Kitson	..	1	..	..	..	59,344
Doncaster	F. W. Fison	1	..	..	..	..	73,157
Elland	Chas. P. Trevelyan	..	1	..	..	..	64,632
Hallamshire	Sir F. Mappin	..	1	..	..	..	73,254
Holmfirth	H. J. Wilson	..	1	..	..	..	65,160
Keighley	J. Brigg	..	1	..	..	..	63,263
Morley	A. E. Hutton	..	1	..	..	..	65,219
Normanton	B. Pickard	..	1	..	..	..	72,013
Osgoldcross	Sir J. Austin	..	1	..	..	..	66,779
Otley	M. D'Arcy Wyvill	1	..	..	..	..	61,746
Pudsey	Briggs Priestley	..	1	..	..	..	49,252
Ripon	J. L. Wharton	1	..	..	..	..	54,925
Rotherham	W. H. Holland	..	1	..	..	..	78,578
Shipley	F. Flannery	..	..	1	..	..	62,166
Skipton	W. Morrison	..	..	1	..	..	58,213
Sowerby	Rt. Hon. J. W. Mellor, Q.C.	..	1	..	..	..	63,192
Spen Valley	T. P. Whittaker	..	1	..	..	..	57,402
Boroughs (26).		9	15	2	..	..	1,579,730
East Riding:							
Hull, Central	Sir H. S. King	1	..	..	..	..	65,565
„ East	J. T. Firbank	1	..	..	..	..	55,492
„ West	C. H. Wilson	..	1	..	..	..	78,603
North Riding:							
Middlesbrough	J. H. Wilson	..	1	..	..	..	98,899
Scarborough	J. C. Rickett	..	1	..	..	..	33,776
York (2)	J. G. Butcher	1	..	..	..	..	66,984
	Sir Chas. Beresford	1	..	..	..	..	
West Riding:							
Bradford, Central	J. M. L. Wanklyn	..	..	1	..	..	65,847
„ East	Capt. The Hon. R. F. Greville	1	..	..	..	..	79,545
„ West	E. Flower	1	..	..	..	..	70,969
Dewsbury	Mark Oldroyd	..	1	..	..	..	72,983
Halifax (2)	A. Billson	..	1	..	..	..	82,863
	A. Arnold	1	..	..	..	..	
Huddersfield	Sir J. T. Woodhouse	..	1	..	..	..	96,495

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
YORKSHIRE—*con.*							
West Riding:							
Leeds, Central	G. W. Balfour	1	..	..	..	..	69,135
„ East	T. R. Leuty	..	1	..	..	..	64,609
„ North	Rt. Hon. W. L. Jackson	1	..	..	..	..	81,547
„ South	J. L. Walton, Q.C.	..	1	..	..	..	70,018
„ West	Rt. Hon. Herbert Gladstone	..	1	..	..	..	82,197
Pontefract	T. W. Nussey	..	1	..	..	..	16,407
Sheffield, Attercliffe	Batty Langley	..	1	..	..	..	72,462
„ Brightside	F. Maddison	..	1	..	..	..	67,083
„ Central	Sir Howard Vincent	1	..	..	..	..	66,461
„ Ecclesall	Sir E. Ashmead-Bartlett	1	..	..	..	..	63,302
„ Hallam	C. B. Stuart-Wortley	1	..	..	..	..	54,935
Wakefield	Viscount Milton	..	..	1	..	..	37,269
		21	27	4	..	..	3,193,176
UNIVERSITIES (5).							
Cambridge (2)	Professor R. C. Jebb	1	..	..	..	..	....
	Rt. Hon. Sir J. E. Gorst	1	..	..	..	..	....
Oxford (2)	Sir W. Anson	1	..	..	..	..	....
	J. G. Talbot	1	..	..	..	..	....
London	Rt. Hon. Sir John Lubbock.	..	..	1	..	..	....
		4	..	1	..	..	....
	WALES.						
ANGLESEY (1).							
County Division (*1*).							
Anglesey	E. J. Griffiths	..	1	..	..	..	50,079
BRECON (1).							
County Division (*1*).							
Brecon	C. Morley	..	1	..	..	..	54,550
CARDIGAN (1).							
County Division (*1*).							
Cardigan	V. Davies	..	1	..	..	..	62,596
CARMARTHEN (3).							
County Divisions (*2*).							
Eastern	Abel Thomas	..	1	..	..	..	49,135
Western	J. Lloyd Morgan	..	1	..	..	..	46,926
		..	2	..	..	..	96,061
Borough (*1*).							
Carmarthen Group	Sir J. J. Jenkins	..	..	1	..	..	34,513
		..	2	1	..	..	130,745

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
CARNARVON (3).							
County Divisions (2).							
Arfon, or N.	W. Jones	..	1	..	..	..	45,822
Eifion, or S.	J. B. Roberts	..	1	..	..	..	42,826
		..	2	..	..	..	88,648
Borough (1).							
Carnarvon Group	D. Lloyd George	..	1	..	..	..	29,577
		..	3	..	..	..	118,225
DENBIGH (3).							
County Divisions (2).							
Eastern	Samuel Moss	..	1	..	..	..	47,317
Western	J. H. Roberts	..	1	..	..	..	46,417
		..	2	..	..	..	93,734
Borough (1).							
Denbigh Group	W. T. Howell	1	..	..	..	..	24,216
		1	2	..	..	..	117,950
FLINT (2).							
County Division (1).							
Flint	Samuel Smith	..	1	..	..	..	53,034
Borough (1).							
Flint Group	J. H. Lewis	..	1	..	..	..	23,251
		..	2	..	..	..	76,285
GLAMORGAN (10).							
County Divisions (5).							
Eastern	Alfred Thomas	..	1	..	..	..	72,465
Gower, or W.	D. D. Randall	..	1	..	..	..	55,261
Mid	S. T. Evans	..	1	..	..	..	60,968
Rhondda	W. Abraham	..	1	..	..	..	68,720
Southern	Major Quinn	1	..	..	..	..	75,337
		1	4	..	..	..	332,751
Boroughs (5).							
Cardiff Group	J. M. Maclean	1	..	..	..	..	132,163
Merthyr Tydvil	D. A. Thomas	..	1	..	..	..	104,008
	W. Pritchard Morgan	..	1	..	..	..	
Swansea District	D. Brynmor Jones	..	1	..	..	..	63,140
„ Town	Sir J. T. D. Llewellyn, Bart.	1	..	..	..	..	57,566
		3	7	..	..	..	689,628
MERIONETH (1).							
County Division (1).							
Merioneth	Owen Morgan Edwards	..	1	..	..	..	49,204

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
MONTGOMERY (2).							
County Division (1).							
Montgomery	A. C. Humphreys Owen....	..	1	..	..	..	40,214
Borough (1).							
Montgomery Group ..	Major E. P. Jones	1	..	..	..	..	17,789
		1	1	..	..	..	58,003
PEMBROKE (2).							
County Division (1).							
Pembroke.....	W. Wynford Philipps.....	..	1	..	..	..	53,921
Borough (1).							
Pembroke Group	Lieut.-General Laurie	1	..	..	..	..	35,204
		1	1	..	..	..	89,125
RADNOR (1).							
County Division (1).							
Radnor.....	Sir P. C. Milbank, Bart.....	1	..	..	..	..	21,791
	SCOTLAND.						
ABERDEEN (4).							
County Divisions (2).							
Eastern	T. R. Buchanan	..	1	..	..	..	79,926
Western	Dr. R. Farquharson	..	1	..	..	..	65,210
Boroughs (2).		..	2	..	..	..	145,136
Aberdeen, North.....	Captain D. V. Pirie.....	..	1	..	..	..	59,992
„ South.....	Professor J. Bryce	..	1	..	..	..	61,631
		..	4	..	..	..	266,759
ARGYLL (1).							
County Division (1).							
Argyll	D. Nicol.....	1	..	..	..	..	61,183
AYR (4).							
County Divisions (2).							
Northern	Hon. T. H. Cochrane	..	..	1	..	..	75,801
Southern	Sir W. Arrol.....	..	..	1	..	..	88,785
Boroughs (2).		..	..	2	..	..	164,586
Ayr Group	C. L. Orr-Ewing	1	..	..	..	..	46,200
Kilmarnock Group....	Colonel Denny.....	1	..	..	..	..	79,828
		2	..	2	..	..	290,614

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
BANFF (1).							
County Division (1).							
Banff	Sir W. Wedderburn, Bart.	..	1	..	..	..	52,663
BERWICK (1).							
County Division (1).							
Berwick	H. J. Tennant	..	1	..	..	..	32,368
BUTE (1).							
County Division (1).							
Bute	A. G. Murray	1	..	..	..	..	18,217
CAITHNESS (2).							
County Division (1).							
Caithness	Dr. G. B. Clark	..	1	..	..	..	28,587
Borough (1).							
Wick Group	T. C. Hedderwick	..	1	..	..	..	18,103
		..	2	..	..	..	46,690
CLACKMANNAN AND KINROSS (1).							
County Division (1).							
Clackmannan & Kinross	Rt. Hon. J. B. Balfour	..	1	..	..	..	44,309
DUMBARTON (1).							
County Division (1).							
Dumbarton	A. Wylie	1	..	..	..	..	77,446
DUMFRIES (2).							
County Division (1).							
Dumfries	R. Souttar	..	1	..	..	..	55,290
Borough (1).							
Dumfries Group	Sir R. T. Reid, Q.C.	..	1	..	..	..	26,183
		..	2	..	..	..	81,473
EDINBURGH (6).							
County Division (1).							
Midlothian	Sir T. D. G. Carmichael	..	1	..	..	..	86,839
Boroughs (5).							
Edinburgh, Central	W. Mc.Ewan	..	1	..	..	..	63,392
„ East	G. Macrae	..	1	..	..	..	61,931
„ South	A. Dewar	..	1	..	..	..	82,337
„ West	Sir L. Mc.Iver	..	..	1	..	..	53,565
Leith Group	R. C. Munro Ferguson	..	1	..	..	..	84,770
		..	5	1	..	..	432,834

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
ELGIN & NAIRN (2).							
County Division (1).							
Elgin and Nairn	J. E. Gordon	1	..	..	...	..	37,613
Borough (1).							
Elgin Group	A. Asher, Q.C.	..	1	..	..	..	33,292
		1	1	..	..	..	70,905
FIFE (4).							
County Divisions (2).							
Eastern	Rt. Hon. H. H. Asquith, Q.C.	..	1	..	..	..	50,996
Western	A. Birrell	..	1	..	..	..	58,458
Boroughs (2).		..	2	..	..	..	109,454
Kirkcaldy Group	J. H. Dalziel	..	1	..	..	..	36,901
St. Andrews Group	H. T. Anstruther	..	..	1	..	..	18,941
		..	3	1	..	..	165,296
FORFAR (4).							
County Division (1).							
Forfar	Capt. J. Sinclair	..	1	..	..	..	67,515
Boroughs (3).							
Dundee (2)	Sir John Leng	..	1	..	..	..	153,051
	E. Robertson	..	1	..	..	..	
Montrose Group	J. Morley	..	1	..	..	..	58,055
		..	4	..	..	..	278,621
HADDINGTON (1).							
County Division (1).							
Haddington	R. B. Haldane, Q.C.	..	1	..	..	..	37,429
INVERNESS (2).							
County Division (1).							
Inverness	J. E. B. Baillie	1	..	..	..	..	69,829
Borough (1).							
Inverness Group	R. B. Finlay	..	..	1	..	..	28,071
		1	..	1	..	..	97,900
KINCARDINE (1).							
County Division (1).							
Kincardine	J. W. Crombie	..	1	..	..	..	34,438
KIRKCUDBRIGHT (1)							
County Division (1).							
Kirkcudbright	Sir M. Stewart	1	..	..	..	..	32,670

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
LANARK (13).							
County Divisions (6).							
Govan	John Wilson	..	1	..	..	..	78,512
Mid	J. Caldwell	..	1	..	..	..	71,258
North-Eastern	Provost Colville	..	1	..	..	..	85,035
North-Western	Dr. C. Douglas	..	1	..	..	..	75,019
Partick	J. Parker Smith	..	..	1	..	..	77,136
Southern	J. H. C. Hozier	1	..	..	..	..	52,032
		1	4	1	..	..	438,992
Boroughs (7).							
Glasgow, Blackfriars & Hutchesontown	A. D. Provand	..	1	..	..	..	73,784
„ Bridgeton	Sir C. Cameron	..	1	..	..	..	81,396
„ Camlachie	Alexander Cross	..	..	1	..	..	71,157
„ Central	J. G. A. Baird	1	..	..	..	..	75,379
„ College	Sir J. Stirling-Maxwell	1	..	..	..	..	98,047
„ St. Rollox	Faithfull Begg	1	..	..	..	..	94,569
„ Tradeston	A. C. Corbett	..	..	1	..	..	70,649
		4	6	3	..	..	1,003,973
LINLITHGOW (1).							
County Division (1).							
Linlithgow	A. Ure	..	1	..	..	..	46,955
ORKNEY AND SHETLAND (1).							
County Division (1).							
Orkney and Shetland	Sir L. Lyell	..	1	..	..	..	54,807
PEEBLES AND SELKIRK (1).							
County Division (1).							
Peebles and Selkirk	W. Thorburn	..	..	1	..	..	19,074
PERTH (3).							
County Divisions (2).							
Eastern	Sir J. Kinloch	..	1	..	..	..	43,645
Western	Sir D. Currie	..	..	1	..	..	47,916
		..	1	1	..	..	91,561
Borough (1).							
Perth	R. Wallace	..	1	..	..	..	29,899
		..	2	1	..	..	121,460

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative.	Liberal.	Liberal U.	Nationalist.	Parnellite.	
RENFREW (4).							
County Divisions (2).							
Eastern	M. H. Shaw-Stewart	1	..	..	..	..	66,137
Western	C. B. Renshaw	1	..	..	..	..	56,622
Boroughs (2).		2	..	..	..	..	122,759
Greenock	Sir T. Sutherland	..	..	1	..	..	63,096
Paisley	Sir W. Dunn, Bart.	..	1	..	..	..	66,418
		2	1	1	..	..	252,273
ROSS & CR'M'RTY (1).							
County Division (1).							
Ross and Cromarty	J. G. Weir	..	1	..	..	..	71,432
ROXBURGH (2).							
County Division (1).							
Roxburgh	Earl of Dalkeith	1	..	..	..	..	34,537
Borough (1).							
Hawick Group	Thomas Shaw	..	1	..	..	..	42,244
		1	1	..	..	..	76,781
STIRLING (3).							
County Division (1).							
Stirling	J. Mc.Killop	1	..	..	..	..	86,293
Boroughs (2).							
Falkirk Group	J. Wilson	..	..	1	..	..	65,346
Stirling Group	H. Campbell-Bannerman	..	1	..	..	..	39,987
		1	1	1	..	..	191,626
SUTHERLAND (1).							
County Division (1).							
Sutherland	J. G. Mc.Leod	..	1	..	..	..	21,267
WIGTOWN (1).							
County Division (1).							
Wigtown	Sir H. E. Maxwell	1	..	..	..	..	35,989
UNIVERSITIES (2).							
Edinbro' & St. Andrews.	Sir Wm. Priestley	1	..	..	..	..	....
Glasgow and Aberdeen.	J. A. Campbell	1	..	..	..	..	....
		2	..	..	..	..	....

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
	IRELAND.						
ANTRIM (8).							
County Divisions (4).							
Eastern	Captain J. Mc.Calmont	1	..	..	..	..	52,032
Mid	The Hon. R. Torrens O'Neill	1	..	..	..	..	50,027
Northern	W. Moore	..	..	1	..	..	51,090
Southern	W. G. E. Macartney	1	..	..	..	..	51,887
		3	..	1	..	..	205,036
Boroughs (4).							
Belfast, East	G. W. Wolff	1	..	..	..	..	85,661
„ North	Sir J. H. Haslett	1	..	..	..	..	67,585
„ South	W. Johnston	1	..	..	..	..	58,508
„ West	H. O. Arnold Foster	..	..	1	..	..	61,360
		6	..	2	..	..	478,150
ARMAGH (3).							
County Divisions (3).							
Mid	D. Dunbar Barton, Q.C.	1	..	..	..	..	45,264
Northern	Colonel Saunderson	1	..	..	..	..	49,157
Southern	E. Mc.Hugh	..	..	..	1	..	43,219
		2	..	..	1	..	137,640
CARLOW (1).							
County Division (1).							
Carlow	J. Hammond	..	..	..	1	..	40,936
CAVAN (2).							
County Divisions (2).							
Eastern	S. Young	..	..	..	1	..	54,402
Western	J. P. Farrell	..	..	..	1	..	57,515
		..	..	..	2	..	111,917
CLARE (2).							
County Divisions (2).							
Eastern	W. Redmond	..	..	..	..	1	61,196
Western	Major Jameson	..	..	..	1	..	63,287
		..	..	..	1	1	124,483

HOUSE OF COMMONS.

Constituencies.	Members.	Politics					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
CORK (9).							
County Divisions (7).							
Eastern	Captain Donelan	..	..	..	1	..	49,700
Mid	Dr. C. Tanner	..	..	..	1	..	49,462
Northern	J. C. Flynn	..	..	..	1	..	49,248
North-Eastern	W. Abraham	..	..	..	1	..	49,873
Southern	Edward Barry	..	..	..	1	..	47,215
South-Eastern	Dr. Commins	..	..	..	1	..	47,030
Western	J. Gilhooly	..	..	..	1	..	48,623
		..	..	..	7	..	341,151
Boroughs (2).							
Cork (2)	J. F. X. O'Brien	..	..	..	1	..	97,281
	Maurice Healy	..	..	..	1	..	
		..	..	..	9	..	438,432
DONEGAL (4).							
County Divisions (4).							
Eastern	Arthur O'Connor	..	..	..	1	..	45,417
Northern	T. B. Curran	..	..	..	1	..	46,248
Southern	J. G. Swift MacNeill	..	..	..	1	..	46,624
Western	T. D. Sullivan	..	..	..	1	..	47,346
		..	..	..	4	..	185,635
DOWN (5).							
County Divisions (4).							
Eastern	J. A. Rentoul	1	..	..	..	..	52,274
Northern	J. B. Houston	1	..	..	..	..	54,179
Southern	M. Mc.Cartan	..	..	..	1	..	51,652
Western	Captain Hill	1	..	..	..	..	50,890
Borough (1).		3	..	..	1	..	208,995
Newry	P. G. Carvill	..	..	..	1	..	13,691
		3	..	..	2	..	222,686
DUBLIN (6).							
County Divisions (2).							
Northern	J. J. Clancy	..	..	..	..	1	75,009
Southern	Hon. Horace Plunkett	1	..	..	..	..	74,491
		1	..	..	..	1	149,500
Boroughs (4).							
Dublin, College Green	J. L. Carew	..	..	..	..	1	67,923
„ Dublin Harbour	T. Harrington	..	..	..	..	1	71,530
„ St. Patrick's	William Field	..	..	..	..	1	64,611
„ St. Stphn's Gr'n	J. H. Campbell	1	..	..	..	..	65,652
		2	..	..	..	4	419,216

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
FERMANAGH (2).							
County Divisions (2).							
Northern	E. M. Archdale	..	..	1	..	..	37,799
Southern	J. Jordan	..	..	..	1	..	36,371
		..	..	1	1	..	74,170
GALWAY (5).							
County Divisions (4).							
Connemara	W. O'Malley	..	..	..	1	..	50,503
Eastern	J. Roche	..	..	..	1	..	49,083
Northern	D. Kilbride	..	..	..	1	..	51,924
Southern	D. Sheehy	..	..	..	1	..	46,243
Borough (1).		..	..	..	4	..	197,753
Galway	J. Pinkerton	..	..	..	1	..	16,959
		..	..	..	5	..	214,712
KERRY (4).							
County Divisions (4).							
Eastern	Hon. J. B. Roche	..	..	..	1	..	44,437
Northern	M. Flavin	..	..	..	1	..	43,417
Southern	T. J. Farrell	..	..	..	1	..	45,588
Western	Sir T. H. G. Esmonde	..	..	..	1	..	45,694
		..	..	..	4	..	179,136
KILDARE (2).							
County Divisions (2).							
Northern	C. J. Engledew	..	..	..	1	..	32,925
Southern	M. J. Minch	..	..	..	1	..	37,281
		..	..	..	2	..	70,206
KILKENNY (3).							
County Divisions (2).							
Northern	P. Mc.Dermott	..	..	..	1	..	35,645
Southern	Samuel Morris	..	..	..	1	..	37,894
Borough (1).		..	..	..	2	..	73,539
Kilkenny	P. O'Brien	..	..	..	..	1	13,722
		..	..	..	2	1	87,261
KING'S COUNTY (2).							
County Divisions (2).							
Birr	B. C. Molloy	..	..	..	1	..	33,992
Tullamore	Dr. J. F. Fox	..	..	..	1	..	31,571
		..	..	..	2	..	65,563

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
LEITRIM (2).							
County Divisions (2).							
North	P. A. Mc.Hugh	..	..	..	1	..	39,235
South	J. Tully	..	..	..	1	..	39,383
		..	..	..	2	..	78,618
LIMERICK (3).							
County Divisions (2).							
Eastern	J. Finucane	..	..	..	1	..	55,912
Western	W. Austin	..	..	..	1	..	56,865
		..	..	..	2	..	112,777
Borough (1).							
Limerick	F. A. O'Keefe	..	..	..	1	..	46,135
		..	..	..	3	..	158,912
LONDONDERRY (3).							
County Divisions (2).							
Northern	R. J. Atkinson, Q.C.	1	..	..	..	..	59,824
Southern	Sir T. Lea	..	..	1	..	..	58,985
		1	..	1	..	..	118,809
Borough (1).							
Londonderry	Count A. J. Moore	..	..	..	1	..	33,200
		1	..	1	1	..	152,009
LONGFORD (2).							
County Divisions (2).							
Northern	Justin Mc.Carthy	..	..	..	1	..	26,735
Southern	Hon. E. Blake	..	..	..	1	..	25,912
		..	..	..	2	..	52,647
LOUTH (2).							
County Divisions (2).							
Northern	Timothy M. Healy	..	..	..	1	..	37,571
Southern	R. M'Ghee	..	..	..	1	..	33,467
		..	..	..	2	..	71,038
MAYO (4).							
County Divisions (4).							
Eastern	John Dillon	..	..	..	1	..	52,454
Northern	D. Crilly	..	..	..	1	..	53,662
Southern	M. Davitt	..	..	..	1	..	55,987
Western	Dr. Robert Ambrose	..	..	..	1	..	56,931
		..	..	..	4	..	219,034

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservtive	Liberal.	Liberal U.	Nationalist.	Parnellite.	
MEATH (2).							
County Divisions (2).							
Northern	J. Gibney	..	..	..	1	..	38,854
Southern	J. H. Parnell	..	..	..	..	1	38,133
		..	..	..	1	1	76,987
MONAGHAN (2).							
County Divisions (2).							
Northern	D. MacAleese	..	..	..	1	..	43,536
Southern	James Daly	..	..	..	1	..	42,670
		..	..	..	2	..	86,206
QUEEN'S COUNTY (2)							
County Divisions (2).							
Leix	M. A. MacDonnell	..	..	..	1	..	32,060
Ossory	E. Crean	..	..	..	1	..	32,823
		..	..	..	2	..	64,883
ROSCOMMON (2).							
County Divisions (2).							
Northern	J. J. O'Kelly	..	..	..	..	1	56,706
Southern	J. P. Hayden	..	..	..	..	1	57,691
		..	..	..	..	2	114,397
SLIGO (2).							
County Divisions (2).							
Northern	B. Collery	..	..	..	1	..	48,686
Southern	Thomas Curran	..	..	..	1	..	49,327
		..	..	..	2	..	98,013
TIPPERARY (4).							
County Divisions (4).							
Eastern	T. J. Condon	..	..	..	1	..	44,738
Mid	J. F. Hogan	..	..	..	1	..	43,900
Northern	P. J. O'Brien	..	..	..	1	..	43,425
Southern	F. Mandeville	..	..	..	1	..	41,125
		..	..	..	4	..	173,188
TYRONE (4).							
County Divisions (4).							
Eastern	B. C. Duggan	..	..	..	1	..	44,760
Mid	G. Murnaghan	..	..	..	1	..	43,404
Northern	Serjeant Hemphill	..	1	..	..	..	42,403
Southern	T. W. Russell	..	..	1	..	..	40,834
		..	1	1	2	..	171,401

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist.	Parnellite.	
WATERFORD (3).							
County Divisions (2).							
Eastern	P. J. Power	..	..	..	1	..	33,347
Western	J. J. Shee	..	..	..	1	..	37,191
Borough (1).		..	..	..	2	..	70,538
Waterford	J. E. Redmond	..	..	..	..	1	27,713
		..	..	..	2	1	98,251
WESTMEATH (2).							
County Divisions (2).							
Northern	J. Tuite	..	..	..	1	..	33,735
Southern	D. Sullivan	..	..	..	1	..	31,374
		..	..	..	2	..	65,109
WEXFORD (2).							
County Divisions (2).							
Northern	Thomas J. Healy	..	..	..	1	..	55,357
Southern	Peter Ffrench	..	..	..	1	..	56,421
		..	..	..	2	..	111,778
WICKLOW (2)							
County Divisions (2).							
Eastern	W. J. Corbet	..	..	..	..	1	31,382
Western	James O'Connor	..	..	..	1	..	30,754
		..	..	..	1	1	62,136
UNIVERSITIES.							
Dublin University (2)	W. E. Lecky	1	..	..	..	..	....
	E. Carson, Q.C.	1	..	..	..	..	....
		2	..	..	..	..	....

STATE OF PARTIES.

	England.	Scotland.	Wales.	Ireland.	Total.
Liberals	123	41	22	1	187
Conservatives	290	19	7	17	333
Liberal Unionists	51	12	1	4	68
Nationalists	1	..	..	70	71
Parnellites	..	..	..	11	11
	465	72	30	103	670

SUMMARY.

	Counties.							Boroughs.							Universities.			Totals.						
	Members.						Population.	Members.						Population.	Members.			Members.						Population.
	Conservative.	Liberal.	Liberal U.	Nationalist.	Parnellite.	Total.		Conservative.	Liberal.	Liberal U.	Nationalist.	Parnellite.	Total.		Conservative.	Liberal U.	Total.	Conservative.	Liberal.	Liberal U.	Nationalist.	Parnellite.	Total.	
England	138	72	24	..	..	234	13,838,248	148	51	26	1	..	226	13,626,602	4	1	5	290	123	51	1	..	465	27,464,850
Wales	2	17	..	..	..	19	996,583	5	5	1	..	..	11	521,427	..	..	..	7	22	1	..	..	30	1,518,010
Scotland	12	22	5	..	..	39	2,179,238	5	19	7	..	..	31	1,838,214	2	..	2	19	41	12	..	..	72	4,017,452
Ireland	12	1	2	64	6	85	3,913,219	3	..	2	6	5	16	791,531	2	..	2	17	1	4	70	11	103	4,704,750
Totals	164	112	31	64	6	377	20,927,288	161	75	36	7	5	284	16,777,774	8	1	9	333	187	68	71	11	670	37,705,062

HOUSE OF COMMONS.

PROFESSIONS OF MEMBERS.

An analysis of the various professions and mercantile positions of the members of the present House of Commons. It will be observed that the total number here represented exceeds those elected; this is brought about by duplicate qualifications.

Bankers and financiers	26
Barristers (in or out of practice) and Q.C.s	131
Brewers and distillers and wine merchants	19
Builder and architect	1
Civil and mining engineers	12
Colliery proprietors and coal merchants	15
Diplomatists and Government officials	9
Estate agents and accountants	4
Farmers and agriculturists	15
Gentry and landowners	105
Hotel proprietors	2
Ironmasters and metal merchants	15
Labour representatives	12
Manufacturers and spinners	54
Medical profession	11
Merchants	35
Military and naval officers (forty-six active service)	119
Newspaper proprietors and journalists	31
Peers' sons and brothers	41
Printers and booksellers	7
Professors of Universities and lecturers	10
Railway contractors	2
Shipowners and builders	18
Solicitors (in or out of practice)	19
Stock and share brokers	4
Shopkeepers and traders	16
Schoolmasters	3
Professions not stated	5

THE GENERAL

RETURN *of* CHARGES *made to* CANDIDATES *at the* GENERAL *(both exclusive and inclusive of Returning Officers' Charges)*

GRAND

—	Number of Polling Districts and Stations.		Number of Polling Booths held in School-rooms.	RETURNING OFFICERS' CHARGES.	
				Cost of Polling Booths.	Cost of Dies, Ballot Papers, Boxes, Advertising, Placards, Stationery, &c.
	Districts.	Stations.			
	1.	2.	3.	4.	5.
England & Wales..	7,042	8,823	6,929	£ 21,893 s. 0 d. 5	£ 13,696 s. 15 d. 5
Scotland ..	777	1,391	1,060	1,906 19 8	1,739 1 9
Ireland	514	1,051	271	1,920 2 4½	1,774 8 7
Total	8,333	11,265	8,260	25,720 2 5½	17,210 5 9

TOTAL EXPENSES OF CANDIDATES, EXCLUSIVE OF RETURNING OFFICERS' CHARGES.

—	Agents.	Clerks and Messengers.	Printing, Advertising, Stationery, Postage, and Telegrams.	Public Meetings.	Committee Rooms.
	11.	12.	13.	14.	15.
England & Wales	£ 117,406 s. 18 d. 10½	£ 68,623 s. 13 d. 5	£ 222,779 s. 5 d. 5½	£ 11,042 s. 15 d. 4	£ 21,397 s. 2 d. 3
Scotland	29,191 2 10	12,161 9 1½	30,873 2 4	2,495 7 4	2,223 14 7½
Ireland..	4,505 11 11	1,641 14 11	5,522 5 2	121 1 7	341 18 6
Total..	151,103 13 7½	82,426 17 5½	259,174 12 11½	13,659 4 3	23,962 15 4½

Number of Electors on Register :		Maximum Scale allowed by Corrupt Practices Act, 1883 :	
England and Wales	4,959,806	England and Wales.....	£797,492
Scotland	634,162	Scotland.....	127,570
Ireland.....	736,552	Ireland	100,145
Total.....	6,330,520	Total.....	£1,025,207

* NOTE.—The Averages in Column 21 have been calculated from the Totals of

ELECTION, 1895.

ELECTION, *in 1895, specifying the* TOTAL EXPENSES *of* CANDIDATES *in* ENGLAND *and* WALES, SCOTLAND, *and* IRELAND.

SUMMARY.

RETURNING OFFICERS' CHARGES.													TOTAL RETURNING OFFICERS' CHARGES AS PAID, WHETHER REDUCED BY TAXATION OR OTHERWISE.
Cost of Presiding Officers, Clerks, Counting Clerks, &c.			Fee charged by Returning Officer or his Official.			All other Charges of the Returning Officer.			TOTAL.			
6.			7.			8.			9.			10.
£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£ s. d.
48,520	17	7	17,158	15	3	6,393	13	9	126,099	19	3	124,927 11 9
8,840	14	8	2,030	8	9	999	19	1	17,946	4	1	17,946 4 1
2,694	4	6	1,416	0	0	524	11	2	11,643	14	6½	13,867 15 6½
60,055	16	9	20,605	4	0	7,918	4	0	155,689	17	10½	156,741 11 4½

TOTAL EXPENSES OF CANDIDATES, EXCLUSIVE OF RETURNING OFFICERS' CHARGES.									Total Expense of Candidates, inclusive of Returning Officers' Charges Paid.			Number of Votes Polled by Candidates.	Average Cost per Vote Polled.
Miscellaneous Matters.			Personal Expenses.			Total Expenses.							
16.			17.			18.			19.			20.	21.
£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.		s. d.
39,517	0	0	33,149	13	10	514,025	2	3	638,952	14	0	3,190,826	*3 10
6,226	19	11	4,957	14	4½	88,129	10	6½	106,075	14	7½	455,729	*4 7¾
1,376	12	10	1,821	11	2½	15,841	14	10½	28,304	11	7½	220,505	*3 1½
47,120	12	9	39,928	19	5	617,996	7	8	773,333	0	3	3,867,060	*3 8¾

Members:		Candidates:	
England and Wales	495	England and Wales	888
Scotland	72	Scotland	144
Irealnd.....	103	Ireland.....	149
Grand Total	670	Grand Total	1,181

Columns 19 and 20, exclusive of expenses incurred in uncontested constituencies.

FOREIGN MONEYS AND THEIR ENGLISH EQUIVALENTS.

COUNTRY.	GOLD COINS. Denominations.	STERLING VALUE. £ s. d.	SILVER COINS. Denominations.	60⅞d., *i.e.*, Gold to Silver as 15·5 is to 1. s. d.
*America	See United States.			
Argentine Republic	Argentino or 5-peso piece	0 19 10	Peso of 100 centesimos	3 11½
*Austria-Hungary	Ducat	0 9 4	*Florin* or *gulden* of 100 kreutzer	1 11⅝
	8-florin or gulden piece	0 15 10¼	¼-florin	0 5⅞
Belgium	See France, and footnote.			
Brazil	10 milreis	1 2 5½	1 milreis of 1,000 reis	2 0¾
*Chili, Columbia, Uruguay	Doubloon or 5-peso piece	0 18 9	1 peso of 100 centavos	3 11½
China	.....	....	Tael of 10 mace or 100 conderin or 1,000 cash	6 6¼
Denmark	10-crown piece	0 11 0¼	1 *crown* of 100 ore	1 0¾
Egypt	100-piastre piece (Egyptian £)	1 0 3½	1 piastre	0 2⅛
Finland	10-markkaa piece	0 7 11½	1 markka of 100 penni	0 9½
*France	10-franc piece	0 7 11¼	5-franc piece	3 11⅝
			1 *franc* of 100 centimes	0 8¾
*German Empire	Crown of 10 reichsmarks	0 9 9½	1 *reichsmark* or mark of 100 pfennige	0 10⅜
*Great Britain	Sovereign of 20 shillings	1 0 0	Crown of 5 shillings	4 7¼
			Shilling of 12 pence	0 11
*Greece	See France, and footnote.			
*Holland and Java	Ducat	0 9 4½	Rixdaler of 2½ florins	4 2
	10-florin piece	0 16 6¼	*Florin* of 100 cents	1 8
India	Mohur of 15 rupees	1 9 2½	Rupee of 16 annas, 64 pice, or 192 pies	1 10½
Italy	See France, and footnote.			
Japan	10-yen piece	2 0 11¾	1 yen of 100 sen	4 3¼
Mexico	10-peso piece	2 0 5¼	1 peso of 100 centavos	4 3¾
*Netherlands	See Holland.			
*Norway and Sweden	See Denmark, and footnote.			
Ottoman Empire	Turkish pound of 100 piastres	0 18 0¾	1 piastre of 40 paras	0 2
Persia	Toman of 200 shahis	0 9 5	Khran of 20 shahis	0 8½

Intrinsic Value with Silver per Troy Ounce.

Peru	10-sol piece	1	19	$7\frac{3}{4}$	Sol of 10 dineros or 100 cents	3	$11\frac{1}{2}$
*Portugal	Crown of 10 milreis	2	4	$4\frac{3}{4}$	*Teston* of 100 reis	0	$4\frac{3}{4}$
*Roumania	See France, and footnote.						
Russia	Imperial of 10 roubles	1	11	9	Rouble of 100 kopecks	3	2
					Tchetvertak or $\frac{1}{4}$ *rouble*	0	$9\frac{1}{2}$
Servia and Bulgaria	See France, and footnote.						
*Spain	Doubloon of 10 escudos	1	0	$7\frac{1}{4}$	Escudo (or $\frac{1}{2}$-dollar) of 10 reals	2	$0\frac{3}{4}$
	25-peseta piece	0	19	10	Peseta of 100 centimos	0	$8\frac{3}{4}$
*Switzerland	See France, and footnote.						
Tunis	10-piastre piece	0	4	$9\frac{1}{2}$	Piastre	0	6
Turkey	See Ottoman Empire.						
*United States	Eagle of 10 dollars	2	1	$1\frac{1}{4}$	Trade dollar	4	$3\frac{3}{4}$
					Dollar of 100 cents	4	$2\frac{3}{4}$
					$\frac{1}{2}$-dollar of 50 cents	1	$11\frac{3}{4}$
Uruguay	See Chili, and footnote.						
Venezuela	See Peru, and footnote.						

Intrinsic Value with Silver per Troy Ounce.

EXPLANATORY NOTES.

France, Belgium, Italy, Greece, and Switzerland constitute what is known as the "Latin" Union, and their coins are alike in weight and fineness, differing occasionally in name. The same system has been in part adopted by Spain, Servia, Bulgaria, Russia, and Roumania, but they have not joined the Union. Francs and centimes of France, Belgium, and Switzerland are designated lire and centesimi in Italy; drachmai and lepta in Greece; dinars and paras in Servia; pesetas and centimos in Spain; leys and banis in Roumania; leva and stotinkis in Bulgaria. Norway, Sweden, and Denmark employ coins of the same weight and fineness, their names being also alike. Most of the South American States possess a standard coin, equal in weight and fineness to the silver 5-fr. piece, generally termed a "peso." In Hayti the corresponding coin is a "gourde."

Every denomination of English money is current in all British colonies. The exchange value of the moneys of those countries indicated by a * is determined by the rate of exchange for the day, and may be taken as approximately that given in the last column. The rate given in the daily papers generally represents the number of the standard coins (those printed in italics) that are equivalent to one sovereign. The Spanish rate is given in terms of the old dollar (=2 escudos). The value of other silver coins is approximately determined by the market value of silver, and may be found in the column headed "Intrinsic Value with Silver at per Troy Ounce." The exchange value of the rupee depends on the rate for "India Council Bills." In "bimetallic" countries pure gold is generally taken as being worth $15\frac{1}{2}$ times its weight of pure silver. This proportion corresponds to giving standard silver a constant value of $60\frac{7}{9}$d. See last column of table.

THE INDIAN

AREA AND POPULATION OF BRITISH TERRITORY, REVENUE

NOTE.—The figures are approximate, and in all the columns except the first *(From Official sources.)* *For explanation*

YEARS.	Area in Square Miles. *a*	Population. *b*	REVENUE.					
			Land Revenue. *c*	Opium.	Taxes. *d*	Public Works. *e*	Other Receipts.	TOTAL.
1846–7....	694,000		14·53	3·68	5·75	—	1·30	25·26
1847–8....	699,000		15·00	2·73	5·75	—	1·19	24·67
1848–9....	771,000		14·83	3·91	5·31	—	1·18	25·23
1849–50 ..	772,000		15·79	4·50	5·85	—	1·27	27·41
1850–1....	776,000	154·79	16·27	3·79	5·72	—	1·77	27·55
1851–2....			16·24	4·26	5·77	—	1·56	27·83
1852–3....	802,000		16·19	5·09	5·82	—	1·51	28·61
1853–4....	828,000		16·07	4·78	5·75	—	1·53	28·13
1854–5....	832,000		16·51	4·71	6·42	—	1·49	29·13
1855–6....			17·11	5·20	6·81	—	1·70	30·82
1856–7*k* ..			17·91	5·01	6·86	·92	2·68	33·38
1857–8....			15·32	6·86	6·19	·48	2·86	31·71
1858–9....			18·12	6·15	7·79	·65	3·35	36·06
1859–60 ..	856,000		18·76	5·89	9·62	·72	4·72	39·71
1860–1....		179·13	18·51	6·68	12·66	·85	4·20	42·90
1861–2....			19·69	6·36	13·43	·59	3·76	43·83
1862–3....			19·57	8·06	13·55	·44	3·52	45·14
1863–4....			20·61*c*	6·83	12·70	·46	4·01	44·61
1864–5....			20·44	7·36	13·30	·59	3·96	45·65
1865–6....			20·84	8·52	12·56	·92	6·10	48·94
1866–7*l* ..			19·45	6·80	11·32	·54	4·01	42·12
1867–8....			20·32	8·92	13·38	·56	5·35	48·53
1868–9....			20·34	8·45	13·38	·55	6·54	49·26
1869–70 ..			21·56	7·95	14·06	·96	6·37	50·90
1870–1....		190·56	21·08	8·04	15·67	·92	5·70	51·41
1871–2....	860,000		21·02	9·26	14·21	·83	4·79	50·11
1872–3....			21·37	8·69	16·25	3·90	6·34	56·55
1873–4....			21·06	8·32	15·65	4·76	6·62	56·41
1874–5....			21·33	8·56	15·91	5·32	6·89	58·01
1875–6....			21·54	8·47	16·26	5·64	7·05	58·96

CENSUS, 1891–2.

AND EXPENDITURE, AND SURPLUS OR DEFICIT, FOR 46 YEARS.

are given in millions and decimals of millions. The values are in Tens of Rupees.

of references see foot of pages 508 and 509.

EXPENDITURE.									
Charges of Collection, &c.	Civil Administration. *g*	Interest.	Army.	Public Works. *h*	Famine.	Miscellaneous. *i*	TOTAL.	Surplus.	Deficit.
5·65	5·45	2·75	11·98	·26	—	·00	26·09	—	·83
6·20	5·87	2·89	11·19	·36	—	—	26·51	—	1·84
6·06	5·72	3·04	11·27	·40	—	·11	26·60	—	1·37
6·06	6·00	3·04	11·39	·35	—	·01	26·85	·56	—
6·22	6·18	3·24	10·83	·46	—	·00	26·93	·62	—
6·36	6·19	3·13	10·81	·61	—	—	27·10	·73	—
6·56	6·48	3·30	11·09	·55	—	—	27·98	·63	—
6·72	6·90	3·47	12·10	·90	—	—	30·09	—	1·96
7·39	7·08	2·92	11·62	1·94	—	—	30·95	—	1·82
7·20	7·21	3·07	11·95	2·43	—	—	31·86	—	1·04
6·87	·88	2·94	12·78	4·34	—	1·04	33·85	—	·47
6·38	8·76	2·98	18·40	3·05	—	—	39·57	—	7·86
6·50	9·91	3·78	25·16	4·29	—	—	49·64	—	13·58
6·68	10·09	4·61	23·50	5·17	—	·43	50·48	—	10·77
7·63	9·89	4·99	18·57	5·37	—	·47	46·92	—	4·02
8·11	7·10	5·19	16·19	6·17	—	1·12	43·88	—	·05
8·49	7·39	5·47	14·89	5·97	—	1·11	43·32	1·82	—
8·97	7·72	5·10	14·55	7·05	—	1·14	44·53	·08	—
8·98	7·81	5·11	15·77	6·72	—	1·45	45·84	—	·19
8·45	8·67	5·21	16·76	5·13	—	1·95	46·17	2·77	—
7·64	8·35	4·89	15·82	6·13	—	1·81	44·64	—	2·52
8·95	9·22	5·74	16·10	7·42	—	2·11	49·54	—	1·01
9·25	9·99	5·65	16·27	8·28	—	2·59	52·03	—	2·77
9·23	10·31	5·61	16·33	6·89	—	2·41	50·78	·12	—
9·27	9·86	5·84	16·07	6·05	—	2·84	49·93	1·48	—
8·52	10·12	5·97	15·68	4·31	—	2·39	46·99	3·12	—
7·34	9·57	5·86	15·50	10·33	—	6·18	54·78	1·77	—
7·50	9·78	5·38	15·23	11·25	3·86	5·22	58·22	—	1·81
7·81	10·05	4·84	15·38	11·53	2·24	5·84	57·69	·32	—
7·87	10·32	4·83	15·70	12·57	·60	5·48	57·37	1·59	—

THE INDIAN

AREA AND POPULATION OF BRITISH TERRITORY, REVENUE

NOTE.—The figures are approximate, and in all the columns except the first

Years.	Area in Square Miles. *a*	Population. *b*	Revenue.					
			Land Revenue. *c*	Opium.	Taxes. *d*	Public Works. *e*	Other Receipts. *f*	Totals.
1876–7 ...			19·89	9·12	16·09	6·61	6·94	58·65
1877–8 ...			20·04	9·18	16·89	8·66	7·20	61·97
1878–9 ...			22·32	9·40	18·54	7·66	7·27	65·19
1879–80..			21·86	0·32	19·15	9·37	7·73	68·43
1880–1 ...		198·79	21·11	10·48	19·38	11·60	11·72	74·29
1881–2 ...			21·94	19·36	19·98	12·95	11·45	75·68
1882–3 ...	868,256		21·87	9·50	17·66	13·05	8·19	70·27
1883–4 ...			22·36	9.56	17·73	14·12	8·07	71·84
1884–5 ...			21·83	8·82	18·45	14·19	7·40	70·69
1885–6 ...			22·59	8·94	18·72	15·88	8·33	74·46
1886–7 ...	947,887		23·06	8·94	20·38	16·86	8·10	77·34
1887–8 ...			23·19	8·51	20·90	16·84	9·32	78·76
1888–9 ...			23·02	8·56	22.22	18·02	9·88	81·70
1889–90..			23·91	8·58	23·68	18·24	10·67	85·08
1890–1 ...			24·04	7·88	24·39	20·05	9·38	85·74
1891–2 ...		221,173	23·96	8·01	24·87	22·84	9·36	89·14
Total for 46 years			914·37	336·99	632·73	257·54	254·33	2,398·06

a Excluding Berar and Mysore.

b The first Census of all British India was taken in 1871. For the population figures of 1861 and 1851 an approximate figure, on the basis of the 1871 census, has been entered, to attain which deduction has been made for the population of recently acquired territory and for an annual increment to the population.

c Including for the years previous to 1864–5, the receipts from recently acquired territory not separately classified; after 1862–3 Forest Receipts are also included. From 1877–8 the portion of Land Revenue due to Irrigation is excluded from this head and shown under Public Works.

d Excise, Assessed, Provincial Rates Customs, Salt, and Stamps. Local Funds were incorporated in the General Accounts in 1878–9 and caused and addition of over £2,000,000 to this head, the amount being balanced by sums entered under various heads on the expenditure side

e Including from 1876–7 Guaranteed Railway Traffic Receipts, and from 1877–8 the portion of Land Revenue due to Irrigation.

CENSUS, 1891–2.

AND EXPENDITURE, AND SURPLUS OR DEFICIT, FOR 46 YEARS.—*con.*
are given in millions and decimals of millions. The values are in Tens of Rupees.

Expenditure.									
Charges of Collections, &c.	Civil Administration. *g*	Interest.	Army.	Public Works. *h*	Famine.	Miscellaneous. *i*	Totals.	Surplus.	Deficit.
8·40	10·61	5·05	16·46	12·86	2·14	5·72	61·24	—	2·59
8·32	10·46	5·15	17·30	13·50	5·34	6·17	66·24	—	4·27
7·47	10·46	5·40	17·94	14·67	·31	6·81	63·06	2·13	—
7·86	10·46	5·39	22·58	16·52	·10	6·75	69·66	—	1·23
8·05	10·67	4·63	28·93	19·19	·03	6·42	77·92	—	3·63
8·22	11·13	4·85	19·69	18·78	1·57	7·84	72·08	3·60	—
8·49	11·04	4·77	18·36	20·31	1·50	5·13	69·60	·67	—
8·49	11·36	4·52	18·12	20·06	1·52	5·89	69·96	1·88	—
9·56	11·74	4·62	16·96	20·47	1·55	6·18	71·08	—	0·39
9·80	12·24	4·33	20·10	21·84	1·50	7·46	77·27	—	2·81
9·75	12·70	4·31	19·52	23·36	·31	7·21	77·16	·18	—
9·44	12·91	5·44	20·42	24·65	·09	7·84	60·79	—	2·03
9·74	13·01	4·71	20·30	25·71	·08	8·11	81·66	·04	—
8·91	13·23	4·24	20·68	26·53	·60	8·28	82·47	2·61	—
9·53	13·38	4·19	20·69	26·39	·60	7·47	82·25	3·49	—
9·55	13·85	4·31	22·28	30·13	1·27	7·28	88·67	·47	—
336·44	433·12	206·75	769·21	481·25	25·21	156·26	2,438·24	30·8	70·86
								Net deficit 40·18	

f Forest, Registration, Tributes, Interest, Post Office, Telegraph, Mint Receipts by Civil and Military Departments, and Miscellaneous.

g Including Minor Departments, Law and Justice, Police, Marine, Education, &c. From 1870–1 to 1875–6 Allotments to Provincial Services are included.

h Previous to 1876–7 the figures include Guaranteed Railway Interest less Traffic Receipts; from 1876–7 the gross payments for Guaranteed Railway Interest is included.

i Including Post Office, Telegraph, Mint, Miscellaneous Civil Charges, Special Defence Works, and Provincial Adjustments.

k A change in the mode of preparing the accounts having been effected in 1856–7, the figures are given in the corrected form.

l The period of the financial year having been altered, the figures for 1886–7 are for eleven months only.

PRESIDENTS OF THE UNITED STATES OF AMERICA.

	YEAR.
Declaration of Independence	4th July, 1776
General Washington, first President	1789 and 1793
John Adams	1797
Thomas Jefferson	1801 and 1805
James Madison	1809 and 1813
James Monroe	1817 and 1821
John Quincy Adams	1825
General Andrew Jackson	1829 and 1833
Martin Van Buren	1837
General William Henry Harrison (died 4th April)	1841
John Tyler (previously Vice-President)	1841
James Knox Polk	1845
General Zachary Taylor (died 9th July, 1850)	1849
Millard Fillmore (previously Vice-President)	1850
General Franklin Pierce	1853
James Buchanan	1857
Abraham Lincoln (assassinated 14th April, 1865)	1861 and 1865
Andrew Johnson (previously Vice-President)	1865
General Ulysses S. Grant	1869 and 1873
Rutherford Richard Hayes, after long contest with Tilden	1877
General Garfield (shot July 2; died September 19)	1881
Chester A. Arthur, Vice-President, succeeded September 20)	1881
Grover Cleveland	1885
General Benjamin Harrison	1889
Grover Cleveland	1893
William M'Kinley	1896

The United States of America form a Federal Republic, consisting of 45 States and 5 Territories.

The estimated population of the whole of the States, including the Territories, according to the Census of 1896, was 71,384,042, every country under heaven being represented. The increase in the ten years 1880-1890 was 12,466,467.

STAMPS, TAXES, AND EXCISE DUTIES, &c.

	£	s.	d.
AFFIDAVIT or STATUTORY DECLARATION	0	2	6
AGREEMENT, or any MEMORANDUM of an AGREEMENT, made under hand only, of the value of £5 or upwards, and not otherwise charged	0	0	6
APPRAISEMENT or VALUATION of any property where the amount of the appraisement or valuation does not exceed £5	0	0	3
Exceeds £5 and does not exceed £10	0	0	6
„ 10 „ 20	0	1	0
„ 20 „ 30	0	1	6
„ 30 „ 40	0	2	0
Exceeds £40 and does not exceed £50	0	2	6
„ 50 „ 100	0	5	0
„ 100 „ 200	0	10	0
„ 200 „ 500	0	15	0
Exceeding £500	1	0	0
APPRENTICESHIP INDENTURES	0	2	6
ARMORIAL BEARINGS.—If used on any carriage	2	2	0
If used for any other purpose	1	1	0
BANK NOTE—For money payable on demand—			
Not exceeding £1	0	0	5
Exceeding £1 and not exceeding £2	0	0	10
„ 2 „ 5	0	1	3
„ 5 „ 10	0	1	9
Exceeding £10 and not exceeding £20	0	2	0
„ 20 „ 30	0	3	0
„ 30 „ 50	0	5	0
„ 50 „ 100	0	8	6
BILL OF EXCHANGE, payable on demand, at sight, or on presentation	0	0	1
BILL OF EXCHANGE and PROMISSORY NOTE, of any kind except a bank note—drawn or payable or negotiated in the United Kingdom, where value does not exceed £5	0	0	1
Exceeds £5 and does not exceed 10	0	0	2
„ 10 „ „ 25	0	0	3
„ 25 „ „ 50	0	0	6
„ 50 „ „ 75	0	0	9
„ 75 „ „ 100	0	1	0
„ 100, for every £100, and also for any fractional part of £100, of such amount or value	0	1	0
BILL OF LADING	0	0	6

BILL OF SALE—Absolute, see *Conveyance on Sale*. By way of security, see *Mortgage*, &c.

BOND for securing the payment or repayment of money or the transfer or re-transfer of stock, see *Mortgage*, &c.

BOND in relation to any annuity upon the original creation and sale thereof, see *Conveyance on Sale*.

	£	s.	d.
CARRIAGES.—For every carriage with four wheels, drawn by two or more horses, or propelled by mechanical power	£2	2	0
For every carriage with four wheels, drawn by one horse	1	1	0
For every carriage with less than four wheels	0	15	0
For every carriage kept for hire, whether two or four wheels	0	15	0

STAMPS, TAXES, AND EXCISE DUTIES, ETC.

	£	s.	d.
CERTIFICATE of any goods or merchandise, having been duly entered inwards, which shall be entered outwards for exportation at the port of importation, or be removed from thence to any other port for the more convenient exportation thereof, where such certificate is issued for enabling any person to obtain a debenture or certificate entitling him to receive any drawback of any duty or duties of customs, or any part thereof	0	4	0
CHARTER PARTY	0	0	6
CONTRACT NOTE for sale or purchase of stock, &c., of the value of £5 and under £100	0	0	1
„ „ „ „ „ „ £100 or upwards	0	1	0
CONVEYANCE or TRANSFER—			
1. Of stock of the Bank of England	0	7	9
2. Of any Colonial Debenture Stock or Funded Debt for every £100, or fractional part of £100, of nominal amount transferred	0	2	6
CONVEYANCE or TRANSFER on sale of any property (except such stock as aforesaid), where the purchase money does not exceed £5	0	0	6

		£	s.	d.			£	s.	d.
Exceeds £5	and does not exceed £10	0	1	0	Exceeds £125	and does not exceed £150	0	15	0
„ 10	„ 15	0	1	6	„ 150	„ 175	0	17	6
„ 15	„ 20	0	2	0	„ 175	„ 200	1	0	0
„ 20	„ 25	0	2	6	„ 200	„ 225	1	2	6
„ 25	„ 50	0	5	0	„ 225	„ 250	1	5	0
„ 50	„ 75	0	7	6	„ 250	„ 275	1	7	6
„ 75	„ 100	0	10	0	„ 275	„ 300	1	10	0
„ 100	„ 125	0	12	6	„ 300				

For every £50, and also for any fractional part of £50, of such amount or value	0	5	0
COPY or EXTRACT (certified) of or from any register of births, baptisms, marriages, deaths, or burials	0	0	1
COPY or EXTRACT (attested or in any other manner authenticated) of or from 1. An instrument chargeable with any duty. 2. An original will, testament, or codicil. 3. The probate or probate copy of a will or codicil. 4. Any letters of administration or any confirmation of a testament. 5. Any public register (except any register of births, baptisms, marriages, deaths, or burials). 6. The books, rolls, or records of any court. In the case of an instrument chargeable with any duty not amounting to one shilling, the same duty as such instrument. In any other case	£0	1	0
DECLARATION of any use or trust of or concerning any property by any writing, not being a deed or will, or any instrument chargeable with *ad valorem* duty as a settlement	0	10	0
DEED of any kind whatsoever, not otherwise charged	0	10	0
DELIVERY ORDER	0	0	1
DOGS.—For each dog over six months old	0	7	6

Exemptions—Shepherds' Dogs and those kept by blind persons for their guides.

GRANT or LICENCE under the sign manual to take and use a surname and arms, or a surname only; in compliance with the injunctions of any will or settlement £50 0 0

Upon any voluntary application 10 0 0

HOUSE DUTY.—On premises of the annual value of—

£20 and not exceeding £40—shops	0	0	2
„ „ „ „ houses	0	0	3
£40 „ „ £60—shops	0	0	4
„ „ „ „ houses	0	0	6
£60 and over—shops	0	0	6
„ „ houses	0	0	9

LEASE or TACK of any lands, tenements, &c.:—

	Not exceeding 35 years, or an indefinite term.			Exceeding 35 years, but not exceeding 100 years.			Exceeding 100 years.		
	£	s.	d.	£	s.	d.	£	s.	d.
Not exceeding £5	0	0	6	0	3	0	0	6	0
Exceeding £5 and not exceeding £10	0	1	0	0	6	0	0	12	0
„ 10 „ „ 15	0	1	6	0	9	0	0	18	0
„ 15 „ „ 20	0	2	0	0	12	0	1	4	0
„ 20 „ „ 25	0	2	6	0	15	0	1	10	0
„ 25 „ „ 50	0	5	0	1	10	0	3	0	0
„ 50 „ „ 75	0	7	6	2	5	0	4	10	0
„ 75 „ „ 100	0	10	0	3	0	0	6	0	0
„ 100, for every £50, or fractional part of £50	0	5	0	1	10	0	3	0	0

MALE SERVANTS.—Every male servant 0 15 0

MORTGAGE, BOND, DEBENTURE, COVENANT, or WARRANT OF ATTORNEY.

1. Being the only or principal security for the payment or repayment of money not exceeding £10	0	0	3
Exceeding £10 and not exceeding £25	0	0	8
„ 25 „ „ 50	0	1	3
„ 50 „ „ 100	0	2	6
„ 100 „ „ 150	0	3	9
„ 150 „ „ 200	0	5	0
„ 200 „ „ 250	0	6	3
„ 250 „ „ 300	0	7	6
„ 300 for every £100, and also for any fractional part of £100, of such amount	0	2	6
2. Being a collateral, or additional or substituted security, or by way of further assurance where the principal security is duly stamped. For every £100, and also for any fractional part of £100 of the amount secured	0	0	6

PATENT MEDICINE VENDORS, Great Britain.—A separate licence is required for each place where sold 0 5 0

	£	s.	d.
POLICY OF INSURANCE upon any life or lives, or upon any event or contingency relating to or depending upon any life or lives, except for the payment of money upon the death of any person only from accident or violence, or otherwise than from a natural cause, where the sum insured does not exceed £10	0	0	1
Exceeds £10 but does not exceed £25	0	0	3
Exceeds £25 but does not exceed £500, for every full sum of £50, and also for any fractional part of £50 of the amount insured	0	0	6
POLICY OF SEA INSURANCE where the premium does not exceed 2s. 6d. per cent	0	0	1
In other cases, for every £100, or fraction thereof, insured	0	0	3
For every policy for time, for every £100, and any fractional part of £100, thereby insured for any time not exceeding six months	0	0	3
Where the insurance shall be made for any time exceeding six months and not exceeding twelve months	0	0	6
RECEIPT given for or upon the payment of money amounting to £2 or upwards	0	0	1
SCRIP CERTIFICATE or SCRIPT	0	0	1
SETTLEMENT.—Any instrument, whether voluntary or upon valuable consideration other than a *bonâ fide* pecuniary consideration, whereby any definite and certain principal sum of money, whether charged or chargeable on lands or not, &c., or to be laid out in the purchase of lands, &c., or not, or any definite and certain amount of stock, &c., is settled or agreed to be settled in any manner whatsoever. For every £100, and also for any fractional part of £100, of the amount settled	0	5	0
TOBACCO AND SNUFF DEALERS.—A separate licence is required for each place where sold	0	5	3
TRANSFER, ASSIGNMENT, DISPOSITION, or ASSIGNMENT of any Mortgage, &c., or of any money secured by such instrument, for every £100, and also for any fractional part of £100, of the amount transferred	0	0	6
And also where any further money is added to the money already secured, the same duty as a principal security for such further money.			
VOTING PAPER.—Any instrument for the purpose of voting by any person entitled to vote at any one meeting	£0	0	1
WARRANT OF ATTORNEY to confess and enter up a judgment given as a security for the payment or repayment of money, or for the transfer or re-transfer of stock. See *Mortgage*, &c.			
WARRANT OF ATTORNEY of any other kind	£0	10	0
WARRANT FOR GOODS	0	0	3
WARRANT under the sign manual of Her Majesty, her heirs or successors	0	10	0

SPOILED STAMPS.—Stamps inadvertently and undesignedly spoiled will be allowed, and postage stamps of the same value given in lieu thereof. Application for allowance must be made at Somerset House, between the hours of 11 and 3, on Monday, Tuesday, Wednesday, Thursday, and Friday, and between the hours of 10 and 1 on Saturday. Application can also be

made at the Inland Revenue Offices, Telegraph Street, Moorgate Street, E.C., on Monday, Wednesday, and Friday, between the hours of 11 and 3; and for the allowance of marine policy stamps between the hours of 11 and 2.

Hours at Somerset House.

Inland Revenue Office.—Daily, 10 a.m. to 5 p.m.

Receiver-General's Office.—No money received after 4 o'clock. (Saturdays, 2 o'clock.)

Stamp Office.—Stamps are issued between the hours of 10 a.m. and 4 p.m. (Saturdays, 10 to 2.) Impressed stamps, 9 a.m. to 4 p.m. (Saturdays, 9 to 2.)

INCOME TAX.

Schedule A.—Lands, Tenements, &c.	£0 0 8
Schedules C, D, and E.—Incomes	0 0 8
Schedule B.—Occupiers of Farms, &c.	0 0 4

If under £160, exempt; under £400, £160 allowed free; under £500, £100 allowed free.

POSTAL INFORMATION.

OFFICIAL POST CARDS.

Official Post Cards impressed with a halfpenny stamp, and official Reply Post Cards impressed with a halfpenny stamp on each portion of them, can be bought at every Post Office.

Nothing whatever may be attached, except adhesive stamps in payment of additional postage or stamp duty, and a gummed label (not to exceed 2 inches long and $\frac{3}{4}$ inch wide) bearing the address at which the card is to be delivered; nor may the card be folded, cut, or otherwise altered. The postage stamp also must be left intact. If any of these rules be infringed, the card ceases to be a Post Card, and is treated as a letter liable on delivery to the usual charges.

PRIVATE CARDS.

A Private Card becomes a Post Card when it has a halfpenny stamp affixed to its face. It must be composed of ordinary cardboard, not thicker than the material used for the Official Post Card. The maximum size must correspond as nearly as may be to the size of the Inland Official Card, and the minimum size must not be less than $3\frac{1}{4}$ by $2\frac{1}{4}$ inches. The rules stated in the preceding paragraph also apply to Private Cards. The essential feature of the Private Post Card is that it must be prepaid. A private Card without a postage stamp is not a Post Card but a letter. For instance, an unpaid Private Card would be charged 2d.

PRIVATE CARDS FOR TRANSMISSION ABROAD.

Private Cards, bearing adhesive stamps of the value of one penny, may now be sent as Post Cards to places abroad, provided that they have the words "Post Card" printed on them, and are in conformity with the Official Post Cards (inland or foreign) in regard to size and substance.

This arrangement applies also to Reply Post Cards. The reply halves must bear adhesive British stamps of the value of one penny affixed by the sender of the double card, and must have printed on them the words "Post Card—Great Britain and Ireland," and "Reply;" they are available for return to the United Kingdom only.

Nothing must appear on the front of a Post Card but the stamps required for postage, postal directions, and the name and address of the sender indicated in writing or by means of a stamp or any typographical process.

The infringement of any of these Rules will render the cards liable to letter postage.

EXPRESS DELIVERY.

Letters and Parcels may now be handed in at Telegraph Offices for Express Delivery by Messenger immediately.

Live animals confined in a cage, basket, or other suitable and safe receptacle, may be accepted for delivery by Special Messenger.

Letters and Parcels may also be handed in at any Post Office, to be forwarded by mail, in which case they will take the ordinary course of post to the Express Delivery Office, and thence be conveyed direct to destination by Express Messenger. The words "Express Delivery" must be boldly and legibly marked on the left-hand side of the cover, above the address; and in the case of a letter the cover must in addition be marked with a broad perpendicular line from top to bottom, both on front and back.

Express Packets not exceeding 1lb. in weight must be prepaid the Express Fee of 3d. a mile only. Packets above 1lb. in weight must be prepaid, in addition, with a Fee of 1d. per lb. as a weight charge for every lb. or part of a lb. after the first lb.

The Postage and Fee must be prepaid in Postage Stamps, to be affixed to a Post Office Form provided for the purpose; or in the case of articles to be forwarded by mail, to the letter or parcel.

An International Express Service has been arranged to and from a number of the Foreign Countries.

SPECIAL DELIVERY OF LETTERS, &C., IN ADVANCE OF THE ORDINARY DELIVERIES BY POSTMEN.

Persons who desire at any time to receive their letters, or other postal packets of any kind (including parcels, book and sample packets, newspapers, and circulars), in advance of the ordinary delivery, may have them delivered by Special Messenger on payment of the following Fees, viz.:—

The full Express Fees as for one packet, and a penny for every 10, or less number, of additional packets beyond the first.

Applications for such special delivery must be signed by the person or firm to which the letters or postal packets in question are addressed. Forms of application may be obtained at any office from which deliveries are made.

The applications should be addressed to the Postmaster of the office from which the letters are ordinarily delivered, and may be delivered by hand or sent through the post prepaid. Care should be taken that the application reaches the Head Post Office on the previous evening, if it is intended to apply to the early delivery in the morning, and, if to other deliveries during the day, an hour at least before the time at which the delivery by Postmen commences.

The Express Fees on at least one packet must be prepaid in stamps affixed to the application. All additional Fees must be paid to the Special Messenger on delivery. A letter which cannot be delivered is returned to the writer from the Returned Letter Office if it contains his address.

Redirection of Letters.—In cases of removal, notice of new address should be sent to the Postmaster in writing.

REGISTERED LETTERS.

Compensation for Loss and Damage.—By law the Postmaster General is not responsible for the safe delivery of registered articles, but subject to certain rules he will, should he consider it right to do so, give compensation for the loss or damage of Inland Registered Postal Packets of all kinds, upon prepayment of a Fee, in addition to the postage, according to the following scale, viz.:—

Fee	2d.	3d.	4d.	5d.	6d.	7d.	8d.	9d.	10d.	11d.	1/- .. 1/1	1/2
Compensation	£5	£10	£20	£30	£40	£50	£60	£70	£80	£90	£100	£110 .. £120

The Fee must be prepaid by postage stamps affixed to the Packet.

The Postal Packet must be registered in accordance with the rules for the time being in force as to Inland Registered Postal Packets, and a certificate of posting, bearing thereon an acknowledgment that the fee for registration and compensation has been paid, must be obtained from the officer to whom the letter is handed. The contents of the Postal Packet must be securely packed and enclosed in a reasonably strong case, wrapper, or cover, securely fastened and of a nature calculated to preserve the contents from loss or damage in the Post, and must bear the words "Fragile, with care." These words should appear on the face of the cover above the address. If it contains any money, it must be enclosed in one of the Registered Letter Envelopes sold by the Post Office for the purpose, and if coin be enclosed, the coins must be packed in such a way as to move about as little as possible. The compensation given in respect of the loss of coin is limited to £2, whatever be the amount enclosed.

In no case will the compensation given exceed the value of the article lost or the damage sustained; and, in every case, either of loss or damage, the Postmaster General reserves the right, if he think fit, to reinstate the contents of a Postal Packet instead of giving the value in money.

By prepaying a further Fee of 2d. Inland and 2½d. Foreign, the sender of a Registered Postal Packet may obtain in due course an Acknowledgment of Delivery signed by the recipient.

Registered Letter Envelopes, embossed with a 2d. stamp, are of five sizes:—

F.. 5¼ × 3¼ inches. } 2½d. each, or
G.. 6 × 3⅝ „ } 2s. 2½d. per dozen.
H.. 8 × 5 inches. } 2¾d. each, or
H2.. 9 × 4 „ } 2s. 7d. per dozen.
K.. 11½ × 6 inches, 3d. each, or 2s. 10d. per dozen.

RATES OF POSTAGE.

INLAND LETTERS.

Pattern Packets and Book Packets weighing more than 2oz.

Not exceeding 4oz. ..... 1d.	Exceeding 8oz., not exceeding 10oz. 2½d.
Exceeding 4oz., not exceeding 6oz. 1½d.	„ 10 „ „ 12 „ 3d.
„ 6 „ „ 8 „ 2d.	and so on, adding ½d. for every 2oz.

The postage on Inland Letters must be paid by stamps, which should be affixed on the right hand upper corner of the address. If the gum be too wet the stamp will not adhere. If not prepaid the postage is doubled, and in case of an insufficient prepayment the letter is charged with double the deficiency.

POSTAL INFORMATION.

An Inland letter, pattern, or book packet must not exceed the dimensions of twenty-four inches in length, twelve inches in width, and twelve inches in depth. The weight is unlimited.

FOREIGN LETTERS, &c., must have Stamps affixed; prepayment of letters for abroad cannot be made in money.

POSTAGE STAMPS are sold at ½d., 1d., 1½d., 2d., 2½d., 3d., 4d., 4½d., 5d., 6d., 9d., 10d., 1s., 2s. 6d., 5s., 10s., £1, £5, and are available for Postage or Receipt purposes, and for Telegrams, and in certain cases for Inland Revenue Stamp Duties.

LETTER CARDS, bearing 1d. for postage up to an ounce, are issued in packets of eight, price 9d.

ENVELOPES embossed with 1d. postage are sold of the following sizes:—

A size, square shape.		C size, 5¼ × 3 inches.		Commercial, 5½ × 3 inches.	
1 for 1½d.	5 for 5½d.	1 for 1½d.	6 for 6½d.	1 for 1½d.	5 for 5½d.
2 „ 2¼d.	10 „ 11d.	2 „ 2¾d.	8 „ 8¾d.	2 „ 2¾d.	10 „ 10½d.
3 „ 3½d.	20 „ 1s. 10d.	3 „ 3¾d.	12 „ 1s. 1d.	3 „ 3¾d.	20 „ 1s. 9d.
4 „ 4½d.		4 „ 4½d.	24 „ 2s. 2d.	4 „ 4¼d.	240 „ 21s.

FOREIGN POSTAGE ENVELOPES, embossed with 2½d. postage, are issued in two sizes: "L" in packets of ten for 2s. 2½d. and "M" ten for 2s. 3d.

ENVELOPES, BEARING AN EMBOSSED HALFPENNY STAMP, suitable for Circulars, &c., entitled to transmission in open covers, at the book-rate of postage, are issued in two sizes:—

COMMERCIAL SIZE, 20 for 11d. FOOLSCAP SIZE, 20 for 1s. And so on in proportion.

INLAND POST CARDS.

PRICES OF STOUT CARDS.				PRICES OF THIN CARDS.			
1	¾d.	6	3¾d.	1	¾d.	6	3½d.
2	1½d.	7	4½d.	2	1½d.	7	4d.
3	2d.	8	5d.	3	1¾d.	8	4½d.
4	2½d.	9	5½d.	4	2½d.	9	5d.
5	3d.	10	6d.	5	2¾d.	10	5½d.
5s. per parcel of 100.				11s. per parcel of 240.			
£12. 6s. per quarter ream uncut.				£11. 8s. per quarter ream uncut.			

Each quarter ream contains 120 sheets, and 42 cards per sheet, or 5,040 cards.

Court or Correspondence Cards: packets of 100, 5s.; quantities of less than 10 as Stout Cards.

PRICES OF DOUBLE OR REPLY INLAND POST CARDS.

STOUT.				THIN.			
1	1¼d.	4	5d.	1	1½d.	4	4½d.
2	2½d.	5	6d.	2	2¼d.	5	5½d.
3	3¾d.			3	3½d.		
5s. parcel of 50.				11s. parcel of 120.			

FOREIGN POST CARDS, with impressed Stamp of 1d.; also Reply-paid Post Cards, 2d. each, are available for the Countries in the Postal Union.

INLAND BOOK POST.

The Inland Book Post is now limited to packets not exceeding 2oz. in weight. The rate of postage is ½d.

No Book Packet may exceed twenty-four inches in length, twelve inches in width, and twelve inches in depth.

POSTAL INFORMATION.

Any Book Packet will be treated as a Letter if found to contain a Letter or communication of the nature of a Letter (not being a Circular Letter), or any enclosure sealed or in any way closed against inspection, or any other enclosure not allowed by the regulations of the Book Post, and will be charged with double Letter Postage, less the value of the stamps affixed.

Advice Notes, Bills of Lading, Invoices, Order Forms, Statements of Account, Prices Current, and Circulars, that is, Printed Notices and Letters in open covers, or ordinary envelopes left unfastened, may be sent at the book-rate.

INLAND PARCEL POST.

1. In order that a packet may be sent by Parcel Post, it must be presented at the counter of a Post Office for transmission as a parcel, and should bear the words "Parcel Post," written conspicuously in the left-hand top corner. It is also very desirable that every parcel should bear the name and address of the sender on the cover; but in such a position as not to be mistaken for the address of the parcel. Parcels may also be accepted by Rural Postmen.

The parcel should not be left until the weight, size, and postage have been tested by the officer who accepts it.

2. Every Post Office is open to the public for Parcel Post business on week days during the same hours as for general postal business. No Parcel Post business is transacted on Sundays. There is no delivery of Parcels on that day in any part of the United Kingdom, nor are parcels allowed to be accepted for transmission. On Christmas Day and Good Friday, in England and Ireland, and on Sacramental Fast Days, or the Public Holidays substituted therefor by the Local Authorities in Scotland, there is one delivery of parcels, but parcels are not accepted for transmission.

3. The size allowed for an Inland Parcel is—

Greatest length	3ft. 6in.
Greatest length and girth combined.....	6ft. 0in.

For example—

A parcel measuring 3ft. 6in. in its longest dimensions may measure as much as 2ft. 6in. in girth, *i.e.*, round its thickest part; or

A short parcel may be thicker; thus, if it measure no more than 3ft. in length, it may measure as much as 3ft. in girth, *i.e.*, round its thickest part.

The most convenient mode of measuring is by means of a tape 6ft. long, having the length of 3ft. 6in. marked thereon. So much of the tape as is not used in measuring the length is the measure of the maximum girth permissible. Such a tape may conveniently be marked in one colour up to 3ft. 6in., and the remaining portion in another colour.

The greatest weight allowed for an inland parcel is 11lbs.

4. The rates of postage are—

	s.	d.
For a parcel not exceeding 1lb. in weight	0	3
For a parcel exceeding 1lb. in weight and not exceeding 2lbs. ..	0	4
„ „ 2lbs. „ „ „ 3 „ ..	0	5
„ „ 3 „ „ „ „ 4 „ ..	0	6
„ „ 4 „ „ „ „ 5 „ ..	0	7
„ „ 5 „ „ „ „ 6 „ ..	0	8
„ „ 6 „ „ „ „ 7 „ ..	0	9
„ „ 7 „ „ „ „ 8 „ ..	0	10
„ „ 8 „ „ „ „ 9 „ ..	0	11
„ „ 9 „ „ „ „ 11 „ ..	1	0

POSTAL INFORMATION.

NEWSPAPERS.

The postage on any registered newspaper for delivery in the United Kingdom is a halfpenny prepaid by stamp; and any number of newspapers, made up in one packet, can be forwarded either at Letter rate or at the rate of a halfpenny each if they are registered newspapers.

A newspaper or a packet of newspapers posted unpaid is chargeable on delivery with double postage; if insufficiently paid, with double the deficiency.

Any newspaper found to contain an unauthorised enclosure will be charged as a letter.

No packet of newspapers must exceed five pounds in weight, nor may it exceed two feet in length by one foot in width or depth.

Newspaper Wrappers are sold at the following prices:—

Bearing Halfpenny Stamp.		Bearing Penny Stamp.	
1 for ¾d.	7 for 4d.	1 for 1¼d.	7 for 7½d.
2 „ 1½d.	14 „ 8d.	2 „ 2½d.	8 „ 8½d.
3 „ 1¾d.	21 „ 1s.	3 „ 3¾d.	16 „ 1s. 5d.
4 „ 2½d.	and so on at the	4 „ 4¼d.	24 „ 2s. 1½d.
5 „ 3d.	rate of 4d. for	5 „ 5½d.	and so on at the rate of
6 „ 3½d.	every complete 7.	6 „ 6¾d.	8½d. for every complete 8.
£1. 2s. 10d. per parcel of 480.		£1. 1s. 3d. per parcel of 240.	

Uncut Sheets are sold only in quarter reams of 120 sheets, each sheet containing 14 wrappers, at £3. 18s. for those bearing halfpenny stamp, and £7. 8s. for those bearing penny stamp.

MONEY ORDERS.

The charge for a Money Order for England, Ireland, and Scotland is for a sum

Not exceeding £1	2d.
Exceeding £1 and not exceeding £3	3d.
„ £3 „ „ £10	4d.

TELEGRAPH MONEY ORDERS can be sent between Telegraph Money Order Offices. For sums not exceeding £3, 4d.; for sums exceeding £3 but not exceeding £10, 6d.

In addition to the commission a charge is made for the official telegrams authorising payment, the minimum being 6d.

The charge for a Foreign or Colonial Money Order is 6d. for a sum not exceeding £2; 1s. not exceeding £6; and 1s. 6d. not exceeding £10.

POSTAL ORDER RATES.

Amount of Order	Rate	Amount of Order	Rate
1s.	½d.	4s. 6d.	1d.
1s. 6d.	½d.	5s.	1d.
2s.	1d.	7s. 6d.	1d.
2s. 6d.	1d.	10s.	1d.
3s.	1d.	10s. 6d.	1d.
3s. 6d.	1d.	15s.	1½d.
4s.	1d.	20s.	1½d.

Postal Orders are issued and paid at every Money Order Office in the United Kingdom, and at Gibraltar, Malta, and Constantinople. Postal Orders issued in India, Straits Settlements, Hong Kong, or Newfoundland are payable in this country, but Postal Orders issued in this country are not payable there. Dog, Gun, Brewing, and Establishment Licences can be obtained at all Money Order Offices.

MEMORANDA AS TO ACTS OF PARLIAMENT RESTRAINING EXPORTATION OF TOOLS &c. USED IN COTTON LINEN WOOLLEN AND SILK MANUFACTURES.

BY Act of 14 Geo. III. c. 75 being "An Act to prevent the Exportation to Foreign Parts of Utensils made use of in the Cotton Linen Woollen and Silk Manufactures of this Kingdom" persons were prohibited from exporting "Tools or Utensils" used in the Cotton Linen Woollen and Silk Manufactures of the Kingdom.

By Act of 21 Geo. III. c. 37 being an Act to explain and amend the last-mentioned Act it was enacted—

> That if at any time after the 24th day of June 1781 any person or persons in Great Britain or Ireland shall upon any pretence whatsoever load or put on board or pack or cause or procure to be loaden put on board or packed in order to be loaded or put on board of any ship or vessel which shall not be bound directly to some port or place in Great Britain or Ireland or shall lade or cause or procure to be laden on board any boat or other vessel or shall bring or cause to be brought to any quay wharf or other place in order to be so laden or put on board any such ship or vessel *any machine engine tool press paper utensil or implement* whatsoever which now is or at any time or times hereafter shall or may be used in or proper for the preparing working pressing finishing or completing of the *Woollen Cotton Linen or Silk Manufactures* of this Kingdom or any or either of them or any other goods wherein Wool Cotton Linen or Silk or any or either of them are or is used or any part or parts of such machine engine tool press paper utensil or implement by what name or names soever the same shall be called or known; or any *model or plan or models or plans* of any such machine engine tool press paper utensil or implement or any part or parts thereof.

Any Justice might grant a warrant to seize the machines &c. and on conviction the person offending should forfeit the machines &c. and a sum of £200 and be imprisoned for twelve months without bail and until the forfeiture should be paid.

Penalties were also imposed on the Masters of Ships and Custom House Officers conniving at any offence and on persons making machines &c.

Table Showing Sums Payable in Foreign Currencies on Money Orders Issued in United Kingdom.

VALUE OF ENGLISH MONEY IN

English Money.			Belgium, France, and Algeria, Italy and Switzerland.		Germany and Heligoland.		Holland and Dutch East Indies.		Denmark, Iceland, Norway, and Danish West Indies.		Sweden.		Portugal, Azores, and Madeira.	Egypt.		United States, Canada, and Hawaii.	
£	s.	d.	Francs.	Cents.	Marks.	Pfen.	Florins.	Cents.	Kroner.	Ore.	Kroner.	Ore.	Reis.	Piastres.	Paras.	Dollars.	Cents.
0	0	1	0	10	0	8	0	5	0	7	0	7	10	0	16	0	2
0	0	2	0	20	0	17	0	10	0	15	0	15	30	0	32	0	4
0	0	3	0	30	0	25	0	15	0	22	0	22	50	1	8	0	6
0	0	4	0	40	0	34	0	20	0	30	0	30	70	1	25	0	8
0	0	5	0	50	0	42	0	20	0	37	0	37	90	2	1	0	10
0	0	6	0	60	0	51	0	25	0	45	0	45	110	2	17	0	12
0	0	7	0	70	0	59	0	30	0	52	0	52	130	2	33	0	14
0	0	8	0	80	0	68	0	35	0	60	0	60	150	3	10	0	16
0	0	9	0	90	0	76	0	40	0	68	0	68	170	3	26	0	18
0	0	10	1	0	0	85	0	45	0	75	0	75	190	4	2	0	20
0	0	11	1	10	0	93	0	50	0	83	0	83	200	4	18	0	22
0	1	0	1	20	1	2	0	55	0	90	0	90	220	4	35	0	24
0	2	0	2	50	2	4	1	15	1	81	1	81	450	9	30	0	48
0	3	0	3	70	3	6	1	75	2	72	2	72	680	14	25	0	73
0	4	0	5	0	4	8	2	35	3	63	3	62	910	19	20	0	97
0	5	0	6	30	5	10	2	95	4	53	4	53	1,140	24	15	1	21
0	6	0	7	50	6	12	3	55	5	44	5	43	1,370	29	10	1	46
0	7	0	8	80	7	14	4	15	6	35	6	34	1,590	34	5	1	70
0	8	0	10	0	8	16	4	75	7	26	7	24	1,820	39	0	1	94
0	9	0	11	30	9	18	5	35	8	16	8	15	2,050	43	35	2	19
0	10	0	12	60	10	20	5	95	9	7	9	6	2,280	48	30	2	43
0	11	0	13	80	11	22	6	55	9	98	9	96	2,510	53	25	2	67
0	12	0	15	10	12	24	7	15	10	89	10	87	2,740	58	20	2	93
0	13	0	16	30	13	26	7	75	11	79	11	78	2,970	63	15	3	16
0	14	0	17	60	14	28	8	35	12	70	12	68	3,190	68	10	3	40
0	15	0	18	90	15	30	8	95	13	61	13	60	3,420	73	5	3	65
0	16	0	20	10	16	32	9	55	14	52	14	50	3,650	78	0	3	89
0	17	0	21	40	17	34	10	15	15	42	15	40	3,880	82	35	4	12
0	18	0	22	60	18	36	10	75	16	33	16	31	4,110	87	30	4	38
0	19	0	23	90	19	38	11	35	17	24	17	21	4,340	92	25	4	62
1	0	0	25	20	20	40	11	95	18	15	18	12	4,570	97	20	4	87
2	0	0	50	40	40	80	23	90	36	30	36	24	9,140	195	0	9	74
3	0	0	75	60	61	20	35	85	54	45	54	36	13,710	292	20	14	61
4	0	0	100	80	81	60	47	80	72	60	72	48	18,280	390	0	19	48
5	0	0	126	0	102	0	59	75	90	75	90	60	22,850	487	20	24	35
6	0	0	151	20	122	40	71	70	108	90	108	72	27,420	585	0	29	22
7	0	0	176	40	142	80	83	65	127	5	126	84	31,990	682	20	34	9
8	0	0	201	60	163	20	95	60	145	20	144	96	36,560	780	0	38	96
9	0	0	226	80	183	60	107	55	163	35	163	8	41,130	877	20	43	83
10	0	0	252	0	204	0	119	50	181	50	181	20	45,700	975	0	48	70

INDIA.—Amounts of Money Orders, issued in the United Kingdom on India, are paid in Rupees, Annas, and Pies; the Rupee being the standard of value in India. As, however, the value of the Rupee is subject to constant variation, no tables of conversion can be given. All Orders on India are issued in Sterling, and the equivalent in Rupees is settled by the Post Office at Bombay on arrival of the Advice List from London.

Table Showing Sums Payable in English Money on Money Orders Issued in Foreign Countries, &c.

Belgium and Switzerland.		France, Algeria, and Italy.		Germany and Heligoland.		Holland and Dutch East Indies.		Denmark, Iceland, Norway, and Danish West Indies.		Sweden.		Portugal, Azores, and Madeira.	Egypt.		United States, Canada, and Hawaii.		English Money.		
Francs.	Cents.	Francs.	Cents.	Marks.	Pfen.	Florins.	Cents.	Kroner.	Ore.	Kroner.	Ore.	Reis.	Piastres.	Paras.	Dollars.	Cents.	£	s.	d.
0	11	0	11	0	9	0	6	0	8	0	8	20	0	16	0	3	0	0	1
0	22	0	21	0	18	0	11	0	16	0	16	40	0	32	0	5	0	0	2
0	32	0	32	0	26	0	16	0	23	0	23	60	1	8	0	7	0	0	3
0	43	0	42	0	35	0	21	0	31	0	31	80	1	25	0	9	0	0	4
0	53	0	53	0	43	0	26	0	38	0	38	100	2	1	0	11	0	0	5
0	64	0	63	0	52	0	31	0	46	0	46	120	2	17	0	13	0	0	6
0	74	0	74	0	60	0	36	0	54	0	54	140	2	33	0	15	0	0	7
0	85	0	84	0	69	0	41	0	61	0	61	160	3	10	0	17	0	0	8
0	95	0	95	0	77	0	46	0	69	0	69	180	3	26	0	19	0	0	9
1	6	1	5	0	86	0	51	0	76	0	76	200	4	2	0	21	0	0	10
1	16	1	16	0	94	0	56	0	84	0	84	210	4	18	0	23	0	0	11
1	27	1	26	1	3	0	61	0	91	0	91	230	4	35	0	25	0	1	0
2	53	2	52	2	5	1	22	1	82	1	82	460	9	30	0	49	0	2	0
3	80	3	78	3	8	1	83	2	73	2	72	690	14	25	0	74	0	3	0
5	6	5	4	4	10	2	44	3	64	3	63	920	19	20	0	98	0	4	0
6	33	6	30	5	13	3	4	4	55	4	53	1,150	24	15	1	22	0	5	0
7	59	7	56	6	15	3	65	5	46	5	44	1,380	29	10	1	47	0	6	0
8	86	8	82	7	18	4	26	6	37	6	35	1,600	34	5	1	71	0	7	0
10	12	10	8	8	20	4	87	7	28	7	25	1,830	39	0	1	95	0	8	0
11	39	11	34	9	23	5	48	8	19	8	16	2,060	43	35	2	20	0	9	0
12	65	12	60	10	25	6	8	9	10	9	6	2,290	48	30	2	44	0	10	0
13	92	13	86	11	28	6	69	10	1	9	97	2,520	53	25	2	68	0	11	0
15	18	15	12	12	30	7	30	10	92	10	88	2,750	58	20	2	93	0	12	0
16	45	16	38	13	33	7	91	11	83	11	78	2,980	63	15	3	17	0	13	0
17	71	17	64	14	35	8	52	12	74	12	69	3,200	68	10	3	41	0	14	0
18	98	18	90	15	38	9	12	13	65	13	59	3,430	73	5	3	66	0	15	0
20	24	20	16	16	40	9	73	14	56	14	50	3,660	78	0	3	90	0	16	0
21	51	21	42	17	43	10	34	15	47	15	41	3,890	82	35	4	14	0	17	0
22	77	22	68	18	45	10	95	16	38	16	31	4,120	87	30	4	39	0	18	0
24	4	23	94	19	48	11	56	17	29	17	21	4,350	92	25	4	63	0	19	0
25	30	25	20	20	50	12	16	18	20	18	12	4,570	97	20	4	87	1	0	0
50	60	50	40	41	0	24	32	36	40	36	24	9,140	195	0	9	74	2	0	0
75	90	75	60	61	50	36	48	54	60	54	36	13,710	292	20	14	61	3	0	0
101	20	100	80	82	0	48	64	72	80	72	48	18,280	390	0	19	48	4	0	0
126	50	126	0	102	50	60	80	91	0	90	60	22,850	487	20	24	35	5	0	0
151	80	151	20	123	0	72	96	109	20	108	72	27,420	585	0	29	22	6	0	0
177	10	176	40	143	50	85	12	127	40	126	84	31,990	682	20	34	9	7	0	0
202	40	201	60	164	0	97	28	145	60	144	96	36,560	780	0	38	96	8	0	0
227	70	226	80	184	50	109	44	163	80	163	8	41,130	877	20	43	83	9	0	0
253	0	252	0	205	0	121	60	182	90	181	20	45,700	975	0	48	70	10	0	0

Note.—In calculating amounts payable in the United Kingdom, it must be understood that the Foreign Offices of Exchange reserve to themselves the power of dealing with fractions of a penny as they may deem most convenient. For example, an Order issued in Denmark for 1 Kroner may be credited to this country either as 1s. 1d. or 1s. 2d. An order issued in Switzerland for 53 Francs may be credited either as £2. 1s. 10d. or £2. 1s. 11d.

THE TIME ALL OVER THE WORLD.

When the clock at Greenwich points to Noon the time at the various places is as follows:—

	H.	M.		H.	M.
Boston, U.S.	7	18 a.m.	Copenhagen	12	50 p.m.
Dublin	11	35 a.m.	Florence	12	45 p.m.
Edinburgh	11	47 a.m.	Jerusalem	2	21 p.m.
Glasgow	11	43 a.m.	Madras	5	21 p.m.
Lisbon	11	43 a.m.	Malta	12	58 p.m.
Madrid	11	45 a.m.	Melbourne, Australia	9	40 p.m.
New York, U.S.	7	14 a.m.	Moscow	2	30 p.m.
Penzance	11	38 a.m.	Munich	12	46 p.m.
Philadelphia, U.S.	6	59 a.m.	Paris	12	9 p.m.
Quebec	7	15 a.m.	Pekin	7	46 p.m.
Adelaide, Australia	9	11 p.m.	Prague	12	58 p.m.
Amsterdam	12	19 p.m.	Rome	12	50 p.m.
Athens	1	35 p.m.	Rotterdam	12	18 p.m.
Berlin	12	54 p.m.	St. Petersburg	2	1 p.m.
Berne	12	30 p.m.	Suez	2	10 p.m.
Bombay	4	52 p m.	Sydney, Australia	10	5 p.m.
Brussels	12	17 p.m.	Stockholm	1	12 p.m.
Calcutta	5	54 p.m.	Stuttgardt	0	37 p.m.
Capetown	1	14 p.m.	Vienna	1	6 p.m.
Constantinople	1	56 p.m.			

Hence, by a little calculation, the time for those places at any hour of our day may be ascertained. At places east of London the apparent time is later, and west of London, earlier; for uniformity sake, however, Greenwich time is kept at all railways in Great Britain and Ireland.

TOTAL ANNUAL VALUE OF PROPERTY AND PROFITS ASSESSED,* 1879–98.

Year.	England.	Scotland.	Ireland.	United Kingdom.	Year.
	£	£	£	£	
1879	485,939,056	55,897,204	36,210,037	578,046,297	1879
1880	485,676,370	55,079,954	36,140,577	576,896,901	1880
1881	493,583,819	55,530,028	36,110,043	585,223,890	1881
1882	507,644,153	57,607,470	36,199,354	601,450,977	1882
1883	516,948,272	59,406,708	36,481,078	612,836,058	1883
1884	530,538,379	61,117,685	36,854,135	628,510,199	1884
1885	533,429,560	61,125,422	36,912,150	631,467,132	1885
1886	533,038,774	60,057,933	36,758,915	629,855,622	1886
1887	535,040,455	57,910,114	36,447,393	629,397,962	1887
1888	542,450,177	57,145,262	36,559,254	636,154,693	1888
1889	550,575,255	57,834,226	36,749,208	645,158,689	1889
1890	572,128,525	60,030,510	37,199,578	669,358,613	1890
1891	597,265,843	63,387,529	37,754,177	698,407,549	1891
1892	607,748,110	65,023,424	37,981,150	710,752,684	1892
1893	608,349,961	65,606,195	38,224,943	712,181,099	1893
1894	602,388,699	65,188,840	38,553,336	706,130,875	1894
1895	587,104,088	64,948,095	38,199,492	690,251,675	1895
1896	605,849,574	65,586,227	38,215,755	709,651,556	1896
1897	603,495,266	64,762,653	32,189,145	700,447,064	1897
1898	628,802,067	68,015,264	32,510,964	729,328,295	1898

* The full annual value of lands is given under Schedule B. The profits from the occupation of farm lands were by law deemed to be equal in England and Wales to one-half, and in Scotland and Ireland to one-third the full annual value of the lands up to 1893–94. From 1894–95 a uniform rate of 3d. in the £ was fixed (by Finance Act) as the equivalent for the 8d. rate charged under other schedules of the tax.

BAROMETER INSTRUCTIONS.

COMPILED BY THE LATE ADMIRAL FITZROY, F.R.S.

The barometer should be set regularly by a duly-authorised person, about sunrise, noon, and sunset.

The words on scales of barometers should not be so much regarded for weather indications as the RISING or FALLING of the mercury; for if it stand at CHANGEABLE (29·50) and then rise towards FAIR (30·00) it presages a change of wind or weather, though not so great as if the mercury had risen higher; and, on the contrary, if the mercury stand above FAIR and then fall it presages a change, though not to so great a degree as if it had stood lower; beside which, the direction and force of wind are not in any way noticed.

It is not from the point at which the mercury may stand that we are alone to form a judgment of the state of the weather, but from its RISING or FALLING, and from the movements of immediately PRECEDING days as well as hours, keeping in mind effects of change of DIRECTION, and dryness or moisture, as well as alteration of force or strength of wind.

It should always be remembered that the state of the air FORETELLS COMING weather rather than shows the weather that is PRESENT—an invaluable fact too often overlooked—that the longer the time between the signs and the change foretold by them the longer such altered weather will last; and, on the contrary, the less the time between a warning and a change the shorter will be the continuance of such foretold weather.

If the barometer has been about its ordinary height, say near 30 inches at the sea-level, and is steady on rising, while the thermometer falls and dampness becomes less, north-westerly, northerly, north-easterly wind, or less wind, less rain or snow may be expected.

On the contrary, if a fall takes place with a rising thermometer and increased dampness, wind and rain may be expected from the south-eastward, southward, or south-westward. A fall with low thermometer foretells snow.

When the barometer is rather below its ordinary height, say down to near 29½ inches (at sea-level), a rise foretells less wind, or a change in its direction towards the northward, or less wet; but when it has been very low, about 29 inches, the first rising usually precedes or indicates strong wind—at times heavy squalls—from the north-westward, northward, or north-eastward, AFTER which violence a gradually rising glass foretells improving weather; if the thermometer falls, but if the warmth continues, probably the wind will back (shift against the sun's course), and more southerly or south-westerly wind will follow, especially if the barometer rise is sudden.

The most dangerous shifts of wind, or the HEAVIEST northerly gales, happen soon after the barometer first rises from a very low point; or if the wind veers GRADUALLY, at some time afterwards.

BAROMETER INSTRUCTIONS.

Indications of approaching change of weather and the direction and force of winds are shown less by the height of the barometer than by its falling or rising. Nevertheless, a height of more than 30 (30·00) inches (at the level of the sea) is indicative of fine weather and MODERATE winds, except from east to north, OCCASIONALLY.

A rapid rise of the barometer indicates unsettled weather, a slow movement the contrary; as likewise a STEADY barometer, when continued and with dryness, foretells very fine weather.

A rapid and considerable fall is a sign of stormy weather, and rain or snow. Alternate rising and sinking indicates unsettled or threatening weather.

The greatest depressions of the barometer are with gales from S.E., S., or S.W.; the greatest deviations, with wind from N.W., N., or N.E., or with calm.

A sudden fall of the barometer, with a westerly wind, is sometimes followed by a violent storm from N.W., N., or N.E.

If a gale sets in from the E. or S.E., and the wind veers by the south, the barometer will continue falling until the wind is near a marked change, when a lull MAY occur; after which the gale will soon be renewed, perhaps suddenly and violently, and the veering of the wind towards the N.W., N., or N.E. will be indicated by a rising of the barometer, with a fall of the thermometer.

After very warm and calm weather a storm or squall, with rain, may follow; likewise at any time when the atmosphere is HEATED much above the USUAL temperature of the season.

To know the state of the air not only the barometer AND THERMOMETER, but appearances of the sky should be vigilantly watched.

SIGNS OF WEATHER.

Whether clear or cloudy, a rosy sky at sunset presages fine weather; a red sky in the morning, bad weather or much wind, perhaps rain; a grey sky in the morning, fine weather; a high dawn, wind; a low dawn, fair weather.*

Soft-looking or delicate clouds foretell fine weather, with moderate or light breezes; hard-edged, oily-looking clouds, wind. A dark, gloomy, blue sky is windy, but a light, bright blue sky indicates fine weather. Generally, the softer the clouds look, the less wind (but perhaps more rain) may be expected; and the harder, more "greasy," rolled, tufted, or ragged, the stronger the coming wind will prove. Also a bright yellow sky at sunset presages wind; a pale yellow, wet; and thus, by the prevalence of red, yellow, or grey tints, the coming weather may be foretold very nearly—indeed, if aided by instruments, almost exactly.

* A high dawn is when the first indications of daylight are seen above a bank of clouds. A low dawn is when the day breaks on or near the horizon, the first streaks of light being very low down.

BAROMETER INSTRUCTIONS.

Small inky-looking clouds foretell rain; light scud clouds driving across heavy masses show wind and rain, but if alone may indicate wind only.

High upper clouds crossing the sun, moon, or stars in a direction different from that of the lower clouds, or the wind then felt below, foretell a change of wind.

After fine, clear weather the first signs in the sky of a coming change are usually light streaks, curls, wisps, or mottled patches of white distant clouds, which increase, and are followed by an overcasting of murky vapour that grows into cloudiness. This appearance, more or less oily or watery as wind or rain will prevail, is an infallible sign.

Light, delicate, quiet tints or colours, with soft, undefined forms of clouds, indicate and accompany fine weather; but gaudy or unusual hues, with hard, definitely-outlined clouds, foretell rain, and probably strong wind.

When sea-birds fly out early and far to seaward, moderate wind and fair weather may be expected. When they hang about the land, or over it, sometimes flying inland, expect a strong wind, with stormy weather. As many creatures besides birds are affected by the approach of rain or wind, such indications should not be slighted by an observer who wishes to foresee weather.

Remarkable clearness of atmosphere near the horizon, distant objects such as hills unusually visible, or raised (by refraction),† and what is called a "good HEARING day," may be mentioned among signs of wet, if not wind, to be expected.

More than usual twinkling of the stars, indistinctness or apparent multiplication of the moon's horns, haloes, "wind-dogs" (fragments or pieces of rainbows, sometimes called "wind-galls") seen on detached clouds, and the rainbow, are more or less significant of increasing wind, if not approaching rain with or without wind.

Lastly, the dryness or dampness of the air, and its temperature (for the season), should ALWAYS be considered WITH OTHER indications of change or continuance of wind and weather.

On barometer scales the following contractions may be useful:—

RISE FOR N.E.LY (N.W.-N.-E.) DRY OR LESS WIND.	FALL FOR S.W.LY (S.E.-S.-W.) WET OR MORE WIND.	When the wind shifts against the sun, Trust it not, for back it will run.
— EXCEPT WET FROM N.ED.	— EXCEPT WET FROM N.ED.	FIRST rise after very low Indicates a stronger blow. Long foretold—long last; Short notice—soon past.

† Much refraction is a sign of easterly wind.

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDING SEPTEMBER 30, 1899.

(From Official Sources.)

ROYAL OBSERVATORY, GREENWICH.—Height of Station above Sea Level, 159 Feet.

Year 1898-99.	Pressure of Atmosphere in Month.		Temperature of Air in Month.						Mean Temperature.		Mean Reading of Thermometer.		Rain.	
						Mean								
Month.	Mean.	Range.	Highest.	Lowest.	Range.	of all Highest.	of all Lowest.	Daily Range.	Air.	Dew Point.	Maximum in Rays of Sun.	Minimum on Grass.	Number of days it fell.	Amount Collected.
1898.	In.	In.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Days.	In.
October	29·669	1·492	69·2	37·9	31·3	59·6	48·4	11·2	53·8	48·6	86·2	44·7	17	3·15
November ..	29·678	1·518	60·3	29·0	31·3	51·0	40·5	10·5	45·9	42·7	71·5	32·6	13	2·41
December ..	29·897	1·423	57·8	28·6	29·2	49·9	40·7	9·2	45·8	40·8	61·9	35·1	10	2·22
1899.														
January	29·655	1·762	55·3	29·3	26·0	47·5	37·5	10·0	42·7	38·1	66·1	32·1	18	2·53
February ..	29·732	1·486	63·9	21·9	42·0	48·3	35·7	12·6	41·9	36·6	77·7	30·0	12	1·93
March.....	29·911	1·569	61·2	20·3	40·9	49·9	32·5	17·4	40·8	33·7	86·4	26·4	10	0·61
April	29·652	1·391	64·1	30·7	33·4	54·7	40·2	14·5	46·7	39·7	98·4	35·8	20	3·00
May.....	29·847	1·066	72·7	33·7	39·0	60·5	42·2	18·3	50·9	42·3	119·0	35·2	12	1·65
June	29·890	1·030	81·5	42·1	39·4	72·0	50·3	21·7	60·7	49·2	130·8	41·2	6	0·76
July.....	29·900	0·948	88·5	49·2	39·3	76·9	56·2	20·7	65·7	53·9	135·4	49·0	8	1·74
August	29·918	0·678	90·0	47·2	42·8	77·1	55·7	21·4	65·7	54·5	135·8	46·8	6	0·35
September ..	29·689	0·927	87·3	37·1	50·2	67·4	49·7	17·7	57·7	48·3	112·0	42·4	15	2·23

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDING SEPTEMBER 30, 1899.

(From Official Sources.)

THE OBSERVATORY, LIVERPOOL.—Height of Station above Sea Level, 197 Feet.

Year 1898-99.	Pressure of Atmosphere in Month.		Temperature of Air in Month.						Mean Temperature.		Mean Reading of Thermometer.		Rain.	
						Mean								
Month.	Mean.	Range.	Highest.	Lowest.	Range.	of all Highest.	of all Lowest.	Daily Range.	Air.	Dew Point.	Maximum in Rays of Sun.	Minimum on Grass.	Number of days it fell.	Amount Collected.
1898.	In.	In.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	* Deg.	* Deg.	Days.	In.
October	29·576	1·426	66·7	38·6	28·1	56·5	48·0	8·5	51·5	47·3	92·6	39·8	21	3·35
November ..	29·583	1·602	60·2	28·0	32·2	49·7	41·4	8·3	45·1	41·6	74·2	31·8	16	1·86
December ..	..	..	..	..	..	..	..	..	..	..	62·1	32·1	..	..
1899.														
January	29·515	1·893	54·8	22·7	32·1	45·8	36·3	9·5	40·8	36·6	68·4	28·8	20	2·95
February ..	29·591	1·703	57·6	27·2	30·4	46·3	35·6	10·7	40·8	35·8	86·2	27·5	15	1·48
March.....	29·819	1·627	57·3	26·8	30·5	48·2	36·9	11·3	40·7	35·7	110·5	27·0	48	5·51
April	29·558	1·272	59·3	33·4	25·9	51·5	41·7	9·8	45·2	39·2	111·4	33·2	21	2·29
May	29·783	1·151	64·4	34·9	29·5	56·0	43·2	12·8	48·4	40·9	113·2	36·0	16	2·21
June	29·848	1·163	80·4	46·9	33·5	66·1	53·2	12·9	58·0	50·4	130·8	43·4	8	2·61
July.....	29·849	1·019	72·2	50·5	21·7	66·0	55·6	10·4	59·5	54·4	127·4	47·7	18	2·61
August	29·864	0·682	85·0	50·1	34·9	71·5	56·3	15·2	62·2	53·6	131·6	50·4	12	1·93
September ..	..	..	..	..	..	..	..	..	..	..	119·7	42·3	..	..

* The Mean temperature inserted in these two columns is taken from the Returns of Stonyhurst College, Lancashire, as they were not supplied by Liverpool. The height of station above sea level is 363 feet.

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDING SEPTEMBER 30, 1899.

(From Official Sources.)

THE OBSERVATORY, CARLISLE, SPITAL (CUMBERLAND).—Height of Station above Sea Level, 114 Feet.

Year 1898-99.	Pressure of Atmosphere in Month.		Temperature of Air in Month.						Mean Temperature.		Mean Reading of Thermometer.		Rain.	
						Mean								
Month.	Mean.	Range.	Highest.	Lowest.	Range.	of all Highest.	of all Lowest.	Daily Range.	Air.	Dew Point.	Maximum in Rays of Sun.	Minimum on Grass.	Number of days it fell.	Amount Collected.
1898.	In.	In.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Days.	In.
October	29·654	1·390	75·8	33·2	42·6	59·2	46·0	13·2	52·3	48·9	80·9	42·5	17	3·68
November ..	29·637	1·496	57·8	16·8	41·0	49·8	36·5	13·3	43·3	40·0	60·8	33·0	18	3·10
December ..	29 707	1·456	58·5	23·0	35·5	49·9	38·5	11·4	44·8	42·0	52·2	36·0	24	3·44
1899.														
January	29·546	2·108	52·5	16·8	41·0	44 9	33·0	11·9	39·5	36·3	55·0	30·6	21	4·62
February ..	29·669	1·674	58·0	19·8	38·2	47·7	32·6	15·1	40·5	36·4	67·1	29 6	13	1·66
March.....	29·855	1·592	60·4	14·5	45·9	49·4	33·5	15·9	41·3	37·9	78·5	30·4	15	1·60
April	29·609	1·218	62·8	24·5	38·3	54·2	37·4	16·8	46·2	41·9	87·7	35·2	24	2·58
May.....	29·845	1·200	70·2	26·6	43·6	58·2	38·2	20·0	47·7	44·1	90·7	35·1	14	3·00
June	29·901	1·112	84·0	37·4	46·6	72·9	47·7	25·2	59·5	55·2	104·0	44·3	11	1·18
July.....	29·894	1·048	78·2	45·2	33·0	71·0	53·3	17·7	61·0	58·2	104·4	50·5	15	3·80
August	29·924	0·680	86·5	44·8	41·7	75·0	51·4	23·6	62·6	57·8	101·2	48·7	9	1·80
September ..	29·604	1·018	76·0	34·5	41·5	63·6	44·7	18·9	55·2	49·8	95·6	41·5	22	3·68

REMARKS ON THE WEATHER.

(From Official Sources.)

October, 1898.—The weather was generally mild and dull, with frequent rain from the 15th. The mean high day temperature was 2°·0, and the mean low night temperature 5°·3 above their averages. The mean daily temperature of the air was below its average on the 1st and 2nd, and from the 10th to the 13th, and generally above on all other days, being as much as 10°·8, 12°·6, 9°·6, 9°·4, and 9°·4 in excess on the 21st, 22nd, 26th, 27th, and 29th respectively. The atmospheric pressure was above its average from the 1st to the 12th, and from the 22nd to the 28th, and below on all other days, being particularly so on the 16th, 17th, and 18th, when it was as much as 0·84 inch, 0·94 inch, and 0·86 inch respectively below. The fall of rain was somewhat above its average at all stations. Thunderstorms occurred on the 24th at Halifax; and on the 29th at Lowestoft. Fog prevailed on the 1st at Royston, Hereford, Cambridge, Wolverhampton, and Leeds: on the 2nd at Truro, Hereford, and Cambridge; on the 3rd at the Royal Observatory, Royston, Hereford, Cambridge, Wolverhampton, and Leeds; on the 4th at Truro, Wolverhampton, Leeds, and Carlisle; on the 5th at Truro, Hereford, and Wolverhampton; on the 6th at Hereford and Wolverhampton; on the 7th at Hereford; on the 8th at Oxford and Hereford; on the 9th at Oxford and Hereford; on the 10th at Truro, Oxford, Royston, and Hereford; on the 11th at Royston and Cambridge; on the 12th at Truro, Oxford, Royston, and Hereford; on the 13th at Oxford, Royston, Hereford, and Cambridge; on the 14th at Oxford and Hereford; on the 15th, 16th, 17th, and 18th at Hereford; on the 20th at Leeds; on the 22nd at Hereford; and on the 31st at Truro.

November.—The weather was generally mild and dull, with frequent rain from the 20th. The mean high day temperature was 2°·1, and the mean low night temperature 2°·7 above their averages. The mean daily temperature of the air was generally above its average from the 1st to the 21st, being as much as 10°·5 and 9°·6 in excess on the 16th and 17th respectively; and generally below from the 22nd to the 30th. The atmospheric pressure was generally above its average from the 6th to the 22nd, and generally below on all other days, being as much as 0·93 inch, 0·98 inch, and 0·84 inch below on the 24th, 25th, and 26th respectively. The fall of rain was a little above its average at most stations. Fogs were prevalent from the 9th to the 15th. A thunderstorm occurred on the 24th at Salisbury. Snow fell on the 22nd at Whitchurch, Hereford, Halifax, and Carlisle; on the 23rd at Salisbury, Oxford, Royston, Cambridge, Coventry, Nottingham, Liverpool, Halifax, Leeds, and Stonyhurst; on the 24th at Nottingham and Halifax; on the 28th at Truro, Osborne, Whitchurch, the Royal Observatory, Oxford, Royston, Cambridge, Halifax, Stonyhurst, and Carlisle; and on the 29th at Croydon, Cambridge, Liverpool, Stonyhurst, and Carlisle. Fog prevailed on the 1st at Truro; on the 6th at Truro, Osborne, Whitchurch, the Royal Observatory, and Oxford; on the 7th at Whitchurch and the Royal Observatory; on the 8th at Lowestoft, Halifax, and Leeds; on the 9th at Croydon, Whitchurch, Royston, Cambridge, Lowestoft, Wolverhampton, Halifax, Hull, and Leeds; on the 10th at Croydon, Whitchurch, Royston, Hereford, Cambridge, Lowestoft, Wolverhampton, Halifax, Hull, and Leeds; on the 11th at Croydon, Whitchurch, Royal Observatory, Oxford, Royston, Cambridge, Lowestoft, Wolverhampton, Halifax,

REMARKS ON THE WEATHER.

and Hull; on the 12th at Truro, Whitchurch, Royal Observatory, Royston, Cambridge, Lowestoft, Wolverhampton, Halifax, and Hull; on the 13th at the Royal Observatory, Oxford, and Lowestoft; on the 14th at Truro, Osborne, Croydon, Whitchurch, Royal Observatory, Oxford, Lowestoft, and Halifax; on the 15th at Truro, Osborne, Whitchurch, Royal Observatory, Lowestoft, Halifax, Stonyhurst, and Carlisle; on the 16th at Truro, Royal Observatory, Cambridge, Lowestoft, Halifax, and Stonyhurst; on the 17th at the Royal Observatory, Royston, Cambridge, Lowestoft, and Halifax; on the 19th at Hereford; on the 21st at Royston, Cambridge, and Lowestoft; on the 22nd at Truro; on the 23rd at Truro and Halifax; on the 24th at Halifax; on the 25th at Truro; on the 26th at Royston, Hereford, and Lowestoft; on the 27th at the Royal Observatory and Hereford; on the 28th at Royston; and on the 30th at Truro and Halifax.

December.—The weather was for the most part remarkably mild and dull, with very little sunshine. The mean high day temperature was 5°·5, and the mean low night temperature 5°·8 above their averages. The mean daily temperature of the air was below its average from the 20th to the 24th, and on the 30th and 31st; and above on all other days, being particularly so on the 1st, 2nd, 3rd, 4th, 5th, 6th, 10th, 11th, 12th, 17th, 18th, 26th, and 27th, when it was as much as 9°·3, 12°·4, 10°·9, 14°·2, 12°·2, 11°·1, 10°·8, 12°·9, 12°·6, 10°·8, 13°·8, 9°·4, and 11°·3 respectively in excess of its average. The atmospheric pressure was generally above its average from the 4th to the 26th; and below on all other days, being as much as 0·99 inch below on the 29th. The fall of rain was a little above its average at all stations. A strong south-westerly gale was experienced throughout England on the 27th; extensive damage was done both on land and sea, and many lives were lost. A thunderstorm occurred on the 6th at Halifax. Snow fell on the 6th and 19th at Halifax; on the 20th at Lowestoft; and on the 31st at Halifax, Leeds, and Stonyhurst. Fog prevailed on the 8th at Truro; on the 13th at Halifax and Stonyhurst; on the 15th and 16th at Truro; on the 17th at Truro and Halifax; on the 18th at Truro; on the 21st at Truro, Croydon, Royal Observatory, Oxford, Lowestoft, and Stonyhurst; on the 22nd at Whitchurch, Royal Observatory, and Oxford; on the 24th and 29th at Salisbury; on the 30th at Truro; and on the 31st at Leeds.

January, 1899.—The weather was for the most part mild, dull, and wet. The mean high day temperature of the air was 4°·8, and the mean low night temperature 4°·0 above their averages. The mean daily temperature of the air was generally above its average from the 1st to the 23rd, being particularly so on the 4th, 8th, 9th, 18th, 19th, 20th, 21st, and 22nd, when it was as much as 10°·8, 10°·3, 10°·2, 10°·3, 11°·2, 10°·2, 14°·3, and 10°·4 respectively in excess; and on several other days during this period it was as much as 8°·0 and 9°·0 above its average, and below from the 24th to the 31st. The atmospheric pressure was above its average from the 4th to the 6th, and from the 24th to the 29th, being as much as 0·72 inch and 0·68 inch above on the 25th and 26th respectively, and generally below on all other days, being particularly so on the 1st and 2nd, when it was as much as 0·83 inch and 0·96 inch respectively below. The fall of rain was somewhat above its average at all stations. Thunderstorms occurred on the 11th at Coventry; on the 16th at Llandudno and Halifax; and on the 20th at Halifax. Snow fell on the 1st at Halifax, Leeds, and Stonyhurst; on the 2nd at Osborne, Salisbury, Croydon, Whitchurch, Royal Observatory, Oxford, Halifax, Leeds, and Stonyhurst; on the 8th at Royston; on the 11th at Halifax and Stonyhurst; on the 12th at Cambridge and Llandudno; on the 16th at Halifax; on the 17th at Nottingham, Halifax,

Leeds, Stonyhurst, and Carlisle; on the 18th at Halifax; on the 20th at Nottingham; on the 23rd at Oxford and Leeds; on the 29th at Stonyhurst; and on the 31st at Carlisle. Fog prevailed on the 1st at Whitchurch, Royston, Cambridge, and Leeds; on the 2nd and 3rd at Halifax; on the 4th at Lowestoft; on the 5th at Truro and Whitchurch; on the 6th at Whitchurch; on the 8th and 9th at Leeds; on the 24th at Truro and Halifax; on the 25th at Halifax and Leeds; on the 26th and 27th at Halifax; on the 28th at Royston and Halifax; and on the 29th and 31st at Royston and Cambridge.

FEBRUARY.—The weather was mostly dull, with a remarkably mild period extending from the 7th to the 23rd. The mean high day temperature of the air for the month was 3°·0, and the mean low night temperature 1°·5 above their averages. The mean daily temperature of the air was below its average from the 1st to the 6th, and from the 24th to the 28th; and above on all other days, being particularly so on the 8th, 9th, 10th, 11th, and 13th, when it was as much as 11°·2, 13°·9, 18°·8, 12°·8, and 11°·1 respectively in excess. On the 10th the reading of the maximum thermometer at the Royal Observatory was 63°·9, being higher than any other reading of the maximum thermometer in the month of February back to the year 1841; the nearest approach was 62°·3 in 1846, and the next in order 62°·1 in 1891. Thunderstorms occurred on the 7th at Guernsey and Salisbury; on the 8th at Wolverhampton; on the 13th at Truro, Osborne, Hereford, and Coventry; and on the 14th at Osborne and Llandudno. Snow fell on the 1st at Liverpool, Halifax, and Stonyhurst; on the 2nd at Oxford, Royston, Cambridge, Lowestoft, Halifax, and Stonyhurst; on the 3rd at Croydon and Nottingham; on the 4th at Truro, Ventnor, Osborne, Salisbury, Whitchurch, Oxford, Royston, Hereford, Cambridge, Coventry, Wolverhampton, Llandudno, Liverpool, Halifax, and Stonyhurst; on the 5th at Oxford, Royston, Hereford, Cambridge, and Leeds; on the 6th at Salisbury, Whitchurch, Oxford, Cambridge, Wolverhampton, Nottingham, Halifax, Leeds, and Stonyhurst; and on the 7th and 8th at Nottingham. Fog prevailed on the 3rd at Truro, the Royal Observatory, and Lowestoft; on the 4th at the Royal Observatory, Cambridge, Lowestoft, and Leeds; on the 5th at Royston; on the 7th at Halifax; on the 14th, 15th, and 16th at Truro; on the 17th at Cambridge; on the 18th at Truro, Eastbourne, Croydon, Whitchurch, Royston, Cambridge, Lowestoft, and Halifax; on the 19th at Eastbourne, Whitchurch, Cambridge, Lowestoft, and Halifax; on the 22nd at Leeds; on the 23rd at Truro, Eastbourne, Halifax, and Leeds; on the 24th at Truro, Eastbourne, Whitchurch, Cambridge, Halifax, and Leeds; on the 25th at Croydon, the Royal Observatory, Royston, Hereford, Cambridge, and Halifax; on the 26th at the Royal Observatory and Halifax; on the 27th at Oxford, Halifax, and Leeds; and on the 28th at Truro, Osborne, Croydon, Whitchurch, Royal Observatory, Oxford, and Cambridge.

MARCH.—The weather was dull and generally mild, with the exception of a cold period extending from the 16th to the 25th. The mean high day temperature of the air for the month was of the same value as its average, and the mean low night temperature 2°·6 below its average. The mean daily temperature of the air was above its average from the 8th to the 15th and from the 26th to the 31st, and generally below on all other days, being particularly so on the 21st, 22nd, 23rd, and 24th, when it was as much as 12°·4, 10°·0, 12°·3, and 10°·6 respectively below. Snow fell on the 4th at Hereford, Coventry, Wolverhampton, Halifax, Hull, Stonyhurst, and Carlisle; on the 5th at Lowestoft and Halifax; on the 18th at Cambridge, Halifax, Hull, Leeds, and Stonyhurst; on the 19th at the Royal Observatory, Cambridge, Coventry, Lowestoft, Wolverhampton, Nottingham, Halifax, Leeds, and Stonyhurst; on

the 20th and 21st there was a general fall of snow all over England; on the 22nd at Guernsey, Truro, Ventnor, Eastbourne, the Royal Observatory, Barnet, Lowestoft, Nottingham, Hull, and Leeds; on the 23rd at Guernsey, Truro, Ventnor, Eastbourne, Osborne, Salisbury, Croydon, the Royal Observatory, Oxford, Cambridge, Coventry, Lowestoft, Nottingham, Halifax, Hull, and Stonyhurst; on the 24th at Truro, Eastbourne, the Royal Observatory, Cambridge, and Coventry; and on the 25th at Halifax and Stonyhurst. Fog prevailed on the 1st at Truro; on the 2nd and 3rd at Truro and Eastbourne; on the 7th at Truro; on the 12th at Eastbourne; on the 13th at Truro, Eastbourne, Croydon, the Royal Observatory, Oxford, Cambridge, and Lowestoft; on the 14th at Eastbourne, Croydon, the Royal Observatory, Oxford, and Cambridge; on the 15th at Eastbourne, the Royal Observatory, Oxford, Lowestoft, and Leeds; on the 16th at Eastbourne, Croydon, Royal Observatory, Oxford, Cambridge, Lowestoft, Halifax, and Leeds; on the 17th at Eastbourne, the Royal Observatory, Lowestoft, and Leeds; on the 18th at Guernsey, Ventnor, Eastbourne, and Croydon; on the 24th at Eastbourne; on the 30th at Guernsey; and on the 31st at Guernsey, Ventnor, Eastbourne, Lowestoft, and Halifax.

April.—The weather was wet and dull, with very little sunshine. The mean high day temperature of the air was 2°·7 below the average, and the mean low night temperature 1°·2 above the average. The mean daily temperature of the air was above its average from the 1st to the 6th, and from the 25th to the 29th, and generally below on all other days. The atmospheric pressure was below its average from the 7th to the 16th, and from the 24th to the 29th, and generally above on all other days. The fall of rain was above its average at all stations. The W. wind was very prevalent. Thunderstorms occurred on the 7th at Leeds; and on the 13th at Halifax. Snow fell on the 8th at the Royal Observatory, Oxford, Wolverhampton, Halifax, and Stonyhurst; on the 9th at Barnet and Nottingham; on the 10th at Wolverhampton; on the 11th at Osborne, Croydon, Royal Observatory, Oxford, Cambridge, Wolverhampton, Halifax, and Stonyhurst; on the 12th at Nottingham; on the 16th at Halifax and Stonyhurst; on the 17th at Wolverhampton, Liverpool, Halifax, Hull, Stonyhurst, and Carlisle; and on the 18th at Nottingham. Fog prevailed on the 1st at Guernsey; on the 2nd at Cambridge; on the 21st at Llangammarch Wells; on the 23rd at Guernsey; and on the 28th at Ventnor.

May.—The weather was generally cold and dull, with frequent rain from the 15th to the 25th. The mean high day temperature of the air was 3°·8, and the mean low night temperature 1°·6 below their averages. The mean daily temperature of the air was above its average from the 17th to the 20th, and on the 31st, and generally below on all other days, being particularly so on the 25th, 26th, and 27th, when it was as much as 10°·6, 12°·1, and 10°·7 respectively below its average. The atmospheric pressure was generally below its average from the 9th to the 18th, and generally above from the 1st to the 8th, and from the 19th to the 31st. The fall of rain was a little below its average at all stations. Thunderstorms occurred on the 9th at Liverpool; on the 11th at Truro; on the 12th at Guernsey and Salisbury; on the 15th at Halifax; on the 16th at the Royal Observatory and Hull; on the 20th at Lowestoft; on the 23rd at Lowestoft, Hull, Leeds, and Stonyhurst; and on the 25th at Barnet. Snow fell on the 22nd at Leeds. Fog prevailed on the 9th at Eastbourne and Stonyhurst; on the 10th at Eastbourne, Oxford, and Stonyhurst; on the 11th at Ventnor, Eastbourne, Hereford, and Halifax; on the 12th at Halifax; on the 13th at Cambridge, Halifax, and Stonyhurst; and on the 15th at Stonyhurst.

REMARKS ON THE WEATHER.

JUNE.—The weather was for the most part fine and bright. The mean high day temperature of the air was 1°·0, and the mean low night temperature 0°·3 above their averages. The mean daily temperature of the air was above its average from the 1st to the 7th, from the 16th to the 21st, and from the 26th to the 30th, being particularly so on the 2nd, 5th, and 6th, when it was as much as 11°·4, 9°·2, and 9°·1 respectively in excess; and generally below from the 8th to the 15th, and from the 22nd to the 25th, being as much as 9°·4 below its average on the 14th. The atmospheric pressure was above its average from the 1st to the 17th, and from the 24th to the 27th; and below from the 18th to the 23rd, and from the 28th to the 30th, being as much as 0·75 inch below on the 20th. The fall of rain was small, and below its average at most stations. Thunderstorms occurred on the 20th at Osborne and Hereford; on the 27th at Wolverhampton; on the 28th at Eastbourne, Osborne, Salisbury, Barnstaple, Royal Observatory, Barnet, Oxford, Wolverhampton, Nottingham, Llandudno, Halifax, and Stonyhurst; and on the 30th at Leeds. Fog prevailed on the 4th and 11th at Lowestoft; on the 12th at Guernsey; on the 17th at Guernsey, Oxford, Cambridge, and Lowestoft; on the 18th at Ventnor; and on the 26th at Guernsey.

JULY.—The weather was generally fine, bright, and warm, with a remarkably hot period extending from the 6th to the 22nd. The mean high day temperature of the air was 2°·9, and the mean low night temperature 3°·1 above their averages. The mean daily temperature of the air was below its average from the 1st to the 5th, and generally above on all other days, being particularly so on the 19th, 20th, and 21st, when it was as much as 10°·7, 10°·9, and 11°·1 respectively in excess. The atmospheric pressure was below its average from the 1st to the 3rd, and from the 19th to the 23rd, and generally above on all other days. The fall of rain was small and below its average at all stations. Thunderstorms occurred on the 1st at the Royal Observatory and Oxford; on the 4th at Leeds; on the 7th at Wolverhampton; on the 11th at Salisbury; on the 12th at Ventnor, Osborne, Salisbury, Halifax, and Hull; on the 17th at Oxford; on the 20th at Llandudno and Liverpool; on the 21st at Guernsey, Ventnor, and Osborne; on the 22nd at Guernsey, Ventnor, Osborne, and Salisbury; and on the 23rd at Osborne, Salisbury, the Royal Observatory, and Barnet. Fog prevailed on the 5th at Guernsey; on the 6th at Oxford; on the 7th at Guernsey; on the 11th at Truro; on the 16th at Ventnor; on the 22nd at Cambridge and Lowestoft; on the 29th at Guernsey; and the 31st at Hereford.

AUGUST. The weather was fine, bright, and hot, with an exceptionally hot period extending from July 29th to the 27th of August. The mean high day temperature of the air was 4°·3, and the mean low night temperature 2°·7 above their averages. The mean daily temperature of the air was generally above its average throughout the month, being particularly so on the 15th, 24th, 25th, and 27th, when it was as much as 10°·8, 9°·6, 13°·2, and 10°·5 respectively in excess. The atmospheric pressure was above its average from the 1st to the 26th, and below from the 27th to the 31st. The fall of rain was very small, and greatly below its average at all stations. Thunderstorms occurred on the 4th at Truro, Salisbury, Hereford, Llandudno, Halifax, Leeds, and Stonyhurst; on the 5th at the Royal Observatory and Liverpool; on the 6th at Barnstaple and Stonyhurst; on the 7th at Oxford; on the 15th at Oxford, Cambridge, Coventry, Lowestoft, and Wolverhampton; on the 27th at Halifax, Leeds, and Stonyhurst; on the 28th at Croydon, Oxford, Llandudno, Liverpool, and Leeds; and on the 30th at Osborne and Lowestoft. Fog prevailed on the 3rd at Lowestoft; on the 10th, 11th, and 12th at Cambridge; on the 15th and 16th at Guernsey; on the 23rd at the Royal Observatory; and on the 27th at Lowestoft.

REMARKS ON THE WEATHER.

SEPTEMBER.—The weather was bright and hot till the 9th, being excessively so from the 3rd to the 8th, and generally dull, with frequent rain from the 10th. The mean high day temperature of the air was of the same value as its average, and the mean low night temperature was 0°·5 above its average. The mean daily temperature of the air was above its average from the 1st to the 9th, from the 12th to the 19th, and from the 22nd to the 26th, being as much as 13°·1 and 9°·3 in excess on the 5th and 6th respectively; and below on all other days. The atmospheric pressure was generally below its average from the 1st to the 9th, and from the 14th to the 30th; and above from the 10th to the 13th. The fall of rain was a little below its average at some stations, and greatly in excess of its average at others. Thunderstorms occurred on the 2nd at Oxford, Cambridge, and Lowestoft; on the 3rd at Coventry; on the 6th at Osborne, Salisbury, Croydon, the Royal Observatory, and Lowestoft; on the 7th at Salisbury; on the 16th at Osborne, the Royal Observatory, and Oxford; on the 22nd and 23rd at Halifax; on the 24th at Llandudno; on the 26th at Ventnor and Osborne; on the 27th at Ventnor, Osborne, Coventry, and Lowestoft; on the 28th at Ventnor and Salisbury; and on the 29th at Guernsey, Truro, and Halifax. Fog prevailed on the 4th at Oxford; on the 5th at Truro; and on the 7th, 8th, and 29th at Leeds.

RETURN showing the Average Retail Price per Pound, Avoirdupois, of the Articles of Domestic Consumption, medium qualities, mentioned below, in some of the Principal Cities of Europe, during the Year 1892. *(From Official Sources.)*

Article.	Paris.	Lille.	Berlin.	Frankfort-on-Main.	Hamburg.	Vienna.	Buda-Pesth.	Prague.	Rome.	* Florence.	Brussels.
Beef:—											
Prime	1s. to 1s. 4d.	1s. 5⅜d.	10⅜d.	9d.	11¼d.	8d.	8½d.	7d.	8½d.	9d.	10⅞d.
Medium	7½d. to 10d.	11⅜d.	8½d.	8d.	9½d.	6¼d.	6½d.	6½d.	6d.	7d.	8¾d.
Inferior	..	7⅝d.	6d.	7d.	7½d.	Av. 7d.	4d.	6d.	..	5d.	6⅛d.
Flour:—											
First quality	2d. to 2½d.	2¼d.	1⅜d.	2½d.	2d.	2d.	1 1/10d.	2¼d.	2d.	2½d.	1⅜d.
Second quality	..	..	..	..	..	1¾d.	..	..	..	2⅛d.	..
Wheat-bread:—											
White Household	2d. to 2¼d.	1⅜d.	2¼d.	2d.	3d.	1⅜d.	1 1/10d.	1½d.	2d.	2d.	1½d.
Second quality	..	..	..	..	..	..	..	..	..	1¼d.	..
Third quality	..	..	..	..	..	..	..	..	..	1⅛d.	..
Potatoes:—											
For human consumption	¼d. to ½d.	7/16d.	¼d. to ½d.	½d.	1d.	½d.	¼d.	¼d.	¾d.	½d.	⅝d.
Rice:—											
For human consumption, without husk	2d. to 2¼d.	3⅞d.	3¼d. to 3½d.	2d. to 5d.	3d.	3d.	..	2⅜d.	2½d.	2⅕d. to 3d.	1⅜d.
Sugar:—											
Good white lump, cracked or sawed	6½d.	5¼d.	4¼d. to 4½d.	4d. to 4½d.	4⅜d.	3¾d. to 4d.	4d.	3⅜d.	7½d.	†6½d. to 7½d.	4⅝d.
Coffee:—											
Brazil or plantation, roasted and ground, without chicory or other coffee substitute	2s. 6d. fresh roasted	2s. 0⅜d.	1s. 4⅜d.	1s. 6d.	1s. 5d.	1s. 8½d.	1s. 5½d. (raw)	1s. 8⅜d.	1s. 11d.	1s. 10d. to 2s. 3½d.	‡1s. 2⅜d.

* N.B.—The rate of exchange has been taken at twenty-six lire per £, as being the approximate average for the whole year (1892).

† Imported in the rough, and refined in Italy; the greater portion is stated to be "beet-root."

‡ The coffee is chiefly imported from the Dutch Colonies Brazil coffee is little or not used. The above price refers to coffee *in the bean*, ground coffee is not generally sold in Brussels.

DAILY TIDE TABLES AT LIVERPOOL FOR THE YEAR 1900.

JANUARY.				FEBRUARY.				MARCH.				APRIL.				MAY.				JUNE.			
Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.	
		Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.
		h m	h m			h m	h m			h m	h m			h m	h m			h m	h m			h m	h m
1	M	10 59	11 23	1	Th	..	0 19	1	Th	11 10	11 33	1	☉	..	0 15	1	Tu	0 18	0 40	1	F	1 29	1 49
2	Tu	11 46	..	2	F	0 42	1 4	2	F	11 55	..	2	M	0 37	1 0	2	W	1 2	1 23	2	S	2 8	2 28
3	W	0 10	0 35	3	S	1 26	1 47	3	S	0 18	0 40	3	Tu	1 22	1 42	3	Th	1 44	2 5	3	☉	2 49	3 10
4	Th	0 58	1 20	4	☉	2 8	2 29	4	☉	1 2	1 23	4	W	2 3	2 24	4	F	2 27	2 49	4	M	3 32	3 55
5	F	1 43	2 5	5	M	2 50	3 11	5	M	1 43	2 3	5	Th	2 45	3 7	5	S	3 12	3 36	5	Tu	4 19	4 45
6	S	2 28	2 51	6	Tu	3 32	3 55	6	Tu	2 23	2 44	6	F	3 31	4 0	6	☉	4 3	4 33	6	W	5 15	5 49
7	☉	3 13	3 37	7	W	4 21	4 54	7	W	3 6	3 29	7	S	4 34	5 11	7	M	5 7	5 44	7	Th	6 25	6 59
8	M	4 1	4 28	8	Th	5 32	6 14	8	Th	3 54	4 26	8	☉	5 53	6 40	8	Tu	6 22	7 0	8	F	7 29	7 58
9	Tu	4 58	5 32	9	F	7 1	7 46	9	F	5 2	5 46	9	M	7 21	7 56	9	W	7 33	8 3	9	S	8 26	8 51
10	W	6 11	6 52	10	S	8 28	9 3	10	S	6 32	7 21	10	Tu	8 28	8 56	10	Th	8 29	8 53	10	☉	9 14	9 36
11	Th	7 33	8 10	11	☉	9 33	9 58	11	☉	8 3	8 40	11	W	9 19	9 39	11	F	9 14	9 33	11	M	9 58	10 19
12	F	8 46	9 18	12	M	10 21	10 41	12	M	9 11	9 36	12	Th	9 57	10 14	12	S	9 52	10 10	12	Tu	10 40	11 1
13	S	9 45	10 10	13	Tu	10 59	11 16	13	Tu	9 57	10 16	13	F	10 30	10 46	13	☉	10 28	10 46	13	W	11 23	11 43
14	☉	10 33	10 54	14	W	11 32	11 48	14	W	10 33	10 49	14	S	11 2	11 17	14	M	11 5	11 23	14	Th	..	0 6
15	M	11 14	11 33	15	Th	..	0 4	15	Th	11 5	11 20	15	☉	11 32	11 48	15	Tu	11 42	..	15	F	0 27	0 48
16	Tu	11 52	..	16	F	0 20	0 35	16	F	11 35	11 50	16	M	..	0 6	16	W	0 1	0 20	16	S	1 10	1 32
17	W	0 10	0 28	17	S	0 50	1 4	17	S	..	0 5	17	Tu	0 23	0 40	17	Th	0 39	0 58	17	☉	1 55	2 18
18	Th	0 44	1 1	18	☉	1 19	1 34	18	☉	0 21	0 36	18	W	0 56	1 16	18	F	1 19	1 40	18	M	2 42	3 5
19	F	1 17	1 33	19	M	1 49	2 3	19	M	0 51	1 5	19	Th	1 34	1 53	19	S	2 2	2 25	19	Tu	3 30	3 56
20	S	1 48	2 3	20	Tu	2 18	2 34	20	Tu	1 21	1 37	20	F	2 12	2 33	20	☉	2 48	3 13	20	W	4 24	4 54
21	☉	2 18	2 34	21	W	2 51	3 9	21	W	1 52	2 8	21	S	2 55	3 20	21	M	3 40	4 10	21	Th	5 28	6 4
22	M	2 50	3 6	22	Th	3 30	3 53	22	Th	2 25	2 45	22	☉	3 49	4 22	22	Tu	4 44	5 21	22	F	6 41	7 16
23	Tu	3 24	3 43	23	F	4 21	4 55	23	F	3 6	3 30	23	M	4 59	5 41	23	W	6 0	6 37	23	S	7 49	8 21
24	W	4 6	4 33	24	S	5 36	6 23	24	S	3 57	4 32	24	Tu	6 26	7 7	24	Th	7 11	7 43	24	☉	8 53	9 22
25	Th	5 3	5 39	25	☉	7 14	7 57	25	☉	5 12	5 58	25	W	7 42	8 15	25	F	8 14	8 44	25	M	9 49	10 15
26	F	6 21	7 5	26	M	8 36	9 10	26	M	6 49	7 33	26	Th	8 44	9 10	26	S	9 12	9 37	26	Tu	10 40	11 4
27	S	7 47	8 26	27	Tu	9 38	10 3	27	Tu	8 11	8 44	27	F	9 34	9 57	27	☉	10 2	10 26	27	W	11 27	11 49
28	☉	9 0	9 30	28	W	10 25	10 47	28	W	9 12	9 37	28	S	10 19	10 42	28	M	10 51	11 14	28	Th	..	0 10
29	M	9 56	10 21					29	Th	10 0	10 22	29	☉	11 6	11 30	29	Tu	11 38	..	29	F	0 31	0 51
30	Tu	10 45	11 8					30	F	10 46	11 9	30	M	11 54	..	30	W	0 2	0 25	30	S	1 10	1 29
31	W	11 31	11 54					31	S	11 31	11 53					31	Th	0 47	1 8				

Garston tides 7 minutes later than Liverpool each day.

DAILY TIDE TABLES AT LIVERPOOL FOR THE YEAR 1900—*continued.*

JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				NOVEMBER.				DECEMBER.			
Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.	
		Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.
		h m	h m			h m	h m			h m	h m			h m	h m			h m	h m			h m	h m
1	☾	1 47	2 5	1	W	2 23	2 38	1	S	2 55	3 15	1	M	3 10	3 37	1	Th	5 6	5 49	1	S	5 52	6 32
2	M	2 23	2 40	2	Th	2 54	3 12	2	☾	3 38	4 5	2	Tu	4 9	4 48	2	F	6 33	7 10	2	☾	7 9	7 42
3	Tu	2 58	3 17	3	F	3 31	3 52	3	M	4 38	5 18	3	W	5 33	6 20	3	S	7 43	8 14	3	M	8 12	8 41
4	W	3 36	3 57	4	S	4 17	4 46	4	Tu	6 2	6 49	4	Th	7 5	7 42	4	☾	8 43	9 8	4	Tu	9 9	9 35
5	Th	4 19	4 45	5	☾	5 20	5 59	5	W	7 32	8 11	5	F	8 16	8 45	5	M	9 31	9 53	5	W	10 0	10 26
6	F	5 14	5 46	6	M	6 45	7 27	6	Th	8 44	9 11	6	S	9 11	9 34	6	Tu	10 16	10 41	6	Th	10 51	11 16
7	S	6 22	6 58	7	Tu	8 4	8 37	7	F	9 36	9 59	7	☾	9 56	10 18	7	W	11 6	11 30	7	F	11 41	..
8	☾	7 33	8 7	8	W	9 7	9 34	8	S	10 21	10 43	8	M	10 40	11 3	8	Th	11 55	..	8	S	0 5	0 28
9	M	8 38	9 6	9	Th	9 58	10 21	9	☾	11 6	11 28	9	Tu	11 26	11 50	9	F	0 18	0 41	9	☾	0 50	1 12
10	Tu	9 31	9 55	10	F	10 45	11 8	10	M	11 50	..	10	W	..	0 14	10	S	1 4	1 26	10	M	1 34	1 55
11	W	10 18	10 40	11	S	11 31	11 53	11	Tu	0 13	0 35	11	Th	0 37	0 59	11	☾	1 48	2 11	11	Tu	2 15	2 36
12	Th	11 3	11 26	12	☾	..	0 16	12	W	0 58	1 20	12	F	1 22	1 43	12	M	2 33	2 56	12	W	2 57	3 16
13	F	11 49	..	13	M	0 38	1 1	13	Th	1 41	2 3	13	S	2 5	2 27	13	Tu	3 20	3 46	13	Th	3 37	4 0
14	S	0 12	0 34	14	Tu	1 23	1 43	14	F	2 26	2 48	14	☾	2 50	3 15	14	W	4 16	4 49	14	F	4 25	4 53
15	☾	0 56	1 19	15	W	2 4	2 26	15	S	3 11	3 36	15	M	3 44	4 17	15	Th	5 26	6 4	15	S	5 25	5 59
16	M	1 42	2 4	16	Th	2 48	3 10	16	☾	4 7	4 42	16	Tu	4 56	5 38	16	F	6 42	7 16	16	☾	6 36	7 11
17	Tu	2 26	2 48	17	F	3 34	4 0	17	M	5 24	6 11	17	W	6 23	7 3	17	S	7 47	8 16	17	M	7 43	8 13
18	W	3 11	3 35	18	S	4 30	5 4	18	Tu	6 57	7 38	18	Th	7 38	8 11	18	☾	8 40	9 3	18	Tu	8 41	9 5
19	Th	4 0	4 26	19	☾	5 45	6 31	19	W	8 14	8 46	19	F	8 39	9 3	19	M	9 24	9 43	19	W	9 28	9 49
20	F	4 55	5 30	20	M	7 17	7 57	20	Th	9 12	9 33	20	S	9 25	9 43	20	Tu	10 1	10 18	20	Th	10 10	10 30
21	S	6 8	6 50	21	Tu	8 34	9 6	21	F	9 54	10 13	21	☾	9 59	10 15	21	W	10 36	10 54	21	F	10 51	11 11
22	☾	7 30	8 8	22	W	9 33	9 56	22	S	10 30	10 46	22	M	10 31	10 48	22	Th	11 11	11 29	22	S	11 30	11 50
23	M	8 43	9 14	23	Th	10 17	10 37	23	☾	11 2	11 17	23	Tu	11 4	11 20	23	F	11 47	..	23	☾	..	0 11
24	Tu	9 42	10 8	24	F	10 56	11 14	24	M	11 32	11 48	24	W	11 36	11 52	24	S	0 5	0 24	24	M	0 31	0 51
25	W	10 31	10 53	25	S	11 31	11 47	25	Tu	..	0 4	25	Th	..	0 8	25	☾	0 43	1 1	25	Tu	1 12	1 32
26	Th	11 14	11 34	26	☾	..	0 4	26	W	0 20	0 34	26	F	0 24	0 41	26	M	1 20	1 41	26	W	1 53	2 14
27	F	11 53	..	27	M	0 20	0 35	27	Th	0 49	1 5	27	S	0 58	1 16	27	Tu	2 2	2 24	27	Th	2 36	2 58
28	S	0 12	0 30	28	Tu	0 50	1 6	28	F	1 20	1 36	28	☾	1 33	1 51	28	W	2 46	3 10	28	F	3 21	3 45
29	☾	0 47	1 5	29	W	1 21	1 35	29	S	1 51	2 8	29	M	2 10	2 31	29	Th	3 37	4 7	29	S	4 11	4 42
30	M	1 21	1 36	30	Th	1 49	2 4	30	☾	2 27	2 47	30	Tu	2 55	3 21	30	F	4 39	5 13	30	☾	5 15	5 52
31	Tu	1 52	2 7	31	F	2 20	2 37					31	W	3 52	4 27					31	M	6 33	7 11

Garston tides 7 minutes later than Liverpool each day.

DAILY TIDE TABLES AT GOOLE FOR THE YEAR 1900.

JANUARY.				FEBRUARY.				MARCH.				APRIL.				MAY.				JUNE.			
Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.	
		Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.
		h m	h m			h m	h m			h m	h m			h m	h m			h m	h m			h m	h m
1	M	6 51	7 16	1	Th	8 11	8 35	1	Th	7 4	7 27	1	☽	8 9	8 32	1	Tu	8 34	8 56	1	F	9 45	10 6
2	Tu	7 40	8 3	2	F	8 58	9 20	2	F	7 50	8 12	2	M	8 54	9 16	2	W	9 18	9 39	2	S	10 26	10 46
3	W	8 27	8 51	3	S	9 41	10 3	3	S	8 34	8 56	3	Tu	9 37	9 58	3	Th	10 1	10 23	3	☽	11 7	11 30
4	Th	9 14	9 36	4	☽	10 25	10 47	4	☽	9 17	9 38	4	W	10 19	10 41	4	F	10 45	11 8	4	M	11 55	..
5	F	9 59	10 22	5	M	11 8	11 29	5	M	9 59	10 20	5	Th	11 3	11 27	5	S	11 33	..	5	Tu	0 22	0 50
6	S	10 46	11 9	6	Tu	11 52	..	6	Tu	10 41	11 2	6	F	11 55	..	6	☽	0 2	0 33	6	W	1 19	1 48
7	☽	11 32	11 58	7	W	0 19	0 51	7	W	11 25	11 51	7	S	0 30	1 6	7	M	1 6	1 40	7	Th	2 18	2 48
8	M	.	0 27	8	Th	1 27	2 4	8	Th	..	0 21	8	☽	1 44	2 22	8	Tu	2 13	2 46	8	F	3 17	3 44
9	Tu	0 59	1 32	9	F	2 42	3 21	9	F	0 57	1 35	9	M	3 0	3 36	9	W	3 18	3 48	9	S	4 12	4 39
10	W	2 5	2 38	10	S	4 1	4 40	10	S	2 15	2 56	10	Tu	4 10	4 41	10	Th	4 17	4 43	10	☽	5 4	5 28
11	Th	3 12	3 47	11	☽	5 17	5 48	11	☽	3 37	4 17	11	W	5 10	5 34	11	F	5 7	5 28	11	M	5 51	6 13
12	F	4 23	4 59	12	M	6 13	6 36	12	M	4 53	5 25	12	Th	5 54	6 12	12	S	5 48	6 7	12	Tu	6 34	6 55
13	S	5 33	6 0	13	Tu	6 56	7 15	13	Tu	5 51	6 12	13	F	6 29	6 45	13	☽	6 25	6 43	13	W	7 17	7 39
14	☽	6 25	6 48	14	W	7 32	7 49	14	W	6 31	6 48	14	S	7 1	7 18	14	M	7 2	7 21	14	Th	8 0	8 22
15	M	7 9	7 30	15	Th	8 5	8 20	15	Th	7 4	7 20	15	☽	7 34	7 49	15	Tu	7 40	7 58	15	F	8 43	9 4
16	Tu	7 50	8 9	16	F	8 36	8 51	16	F	7 36	7 52	16	M	8 5	8 22	16	W	8 17	8 36	16	S	9 26	9 48
17	W	8 27	8 44	17	S	9 6	9 20	17	S	8 7	8 22	17	Tu	8 39	8 57	17	Th	8 55	9 15	17	☽	10 11	10 35
18	Th	9 1	9 17	18	☽	9 35	9 50	18	☽	8 37	8 52	18	W	9 14	9 32	18	F	9 35	9 56	18	M	11 0	11 25
19	F	9 33	9 49	19	M	10 5	10 20	19	M	9 7	9 21	19	Th	9 50	10 9	19	S	10 19	10 42	19	Tu	11 52	..
20	S	10 4	10 20	20	Tu	10 36	10 52	20	Tu	9 36	9 52	20	F	10 30	10 51	20	☽	11 6	11 33	20	W	0 22	0 54
21	☽	10 36	10 52	21	W	11 9	11 28	21	W	10 8	10 25	21	S	11 14	11 43	21	M	..	0 5	21	Th	1 27	2 0
22	M	11 8	11 25	22	Th	11 52	..	22	Th	10 43	11 3	22	☽	..	0 17	22	Tu	0 40	1 17	22	F	2 32	3 2
23	Tu	11 45	..	23	F	0 19	0 52	23	F	11 26	11 53	23	M	0 54	1 33	23	W	1 54	2 27	23	S	3 32	4 3
24	W	0 8	0 35	24	S	1 28	2 7	24	S	..	0 26	24	Tu	2 12	2 49	24	Th	2 57	3 26	24	☽	4 35	5 7
25	Th	1 5	1 37	25	☽	2 51	3 31	25	☽	1 4	1 45	25	W	3 24	3 57	25	F	3 56	4 28	25	M	5 37	6 4
26	F	2 11	2 47	26	M	4 11	4 49	26	M	2 27	3 8	26	Th	4 28	4 58	26	S	4 59	5 27	26	Tu	6 30	6 55
27	S	3 24	4 2	27	Tu	5 24	5 53	27	Tu	3 47	4 24	27	F	5 25	5 49	27	☽	5 52	6 17	27	W	7 20	7 44
28	☽	4 39	5 14	28	W	6 18	6 41	28	W	4 58	5 27	28	S	6 12	6 35	28	M	6 42	7 7	28	Th	8 5	8 27
29	M	5 45	6 11					29	Th	5 52	6 15	29	☽	6 59	7 23	29	Tu	7 31	7 55	29	F	8 47	9 7
30	Tu	6 36	7 0					30	F	6 38	7 1	30	M	7 47	8 11	30	W	8 18	8 41	30	S	9 26	9 45
31	W	7 24	7 48					31	S	7 24	7 47					31	Th	9 3	9 24				

Hull tides 59 minutes earlier than Goole each day.

DAILY TIDE TABLES AT GOOLE FOR THE YEAR 1900—*continued.*

JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				NOVEMBER.				DECEMBER.			
Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.		Date.	Day.	GOOLE High Water.	
		Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.
		h m	h m			h m	h m			h m	h m			h m	h m			h m	h m			h m	h m
1	☽	10 4	10 22	1	W	10 40	10 56	1	S	11 14	11 36	1	M	11 33	..	1	Th	1 0	1 38	1	S	1 46	2 19
2	M	10 40	10 58	2	Th	11 13	11 32	2	☽	..	0 4	2	Tu	0 5	0 42	2	F	2 16	2 52	2	☽	2 51	3 23
3	Tu	11 17	11 37	3	F	11 54	..	3	M	0 36	1 12	3	W	1 21	2 2	3	S	3 25	3 57	3	M	3 55	4 26
4	W	11 59	..	4	S	0 19	0 47	4	Tu	1 50	2 29	4	Th	2 42	3 20	4	☽	4 28	4 57	4	Tu	4 57	5 24
5	Th	0 24	0 50	5	☽	1 19	1 53	5	W	3 8	3 46	5	F	3 56	4 30	5	M	5 23	5 46	5	W	5 50	6 15
6	F	1 18	1 47	6	M	2 28	3 5	6	Th	4 23	4 57	6	S	5 0	5 26	6	Tu	6 9	6 32	6	Th	6 41	7 7
7	S	2 16	2 46	7	Tu	3 42	4 18	7	F	5 26	5 52	7	☽	5 49	6 11	7	W	6 57	7 22	7	F	7 33	7 58
8	☽	3 17	3 48	8	W	4 51	5 21	8	S	6 15	6 37	8	M	6 34	6 57	8	Th	7 47	8 11	8	S	8 22	8 45
9	M	4 20	4 52	9	Th	5 49	6 13	9	☽	6 59	7 22	9	Tu	7 20	7 43	9	F	8 34	8 57	9	☽	9 7	9 28
10	Tu	5 21	5 47	10	F	6 36	6 59	10	M	7 45	8 7	10	W	8 6	8 29	10	S	9 20	9 43	10	M	9 50	10 12
11	W	6 12	6 34	11	S	7 23	7 47	11	Tu	8 29	8 51	11	Th	8 52	9 15	11	☽	10 6	10 29	11	Tu	10 33	10 54
12	Th	6 56	7 19	12	☽	8 10	8 32	12	W	9 13	9 35	12	F	9 38	10 0	12	M	10 52	11 16	12	W	11 15	11 38
13	F	7 42	8 5	13	M	8 55	9 17	13	Th	9 57	10 20	13	S	10 23	10 46	13	Tu	11 44	..	13	Th	..	0 3
14	S	8 28	8 50	14	Tu	9 39	10 0	14	F	10 44	11 7	14	☽	11 11	11 39	14	W	0 16	0 49	14	F	0 30	0 58
15	☽	9 12	9 35	15	W	10 21	10 43	15	S	11 32	..	15	M	..	0 13	15	Th	1 22	1 55	15	S	1 27	1 56
16	M	9 58	10 21	16	Th	11 6	11 29	16	☽	0 2	0 38	16	Tu	0 50	1 29	16	F	2 28	3 0	16	☽	2 26	2 56
17	Tu	10 44	11 7	17	F	11 55	..	17	M	1 16	1 55	17	W	2 7	2 44	17	S	3 31	4 1	17	M	3 27	3 57
18	W	11 31	11 56	18	S	0 27	1 1	18	Tu	2 35	3 14	18	Th	3 19	3 52	18	☽	4 29	4 55	18	Tu	4 26	4 54
19	Th	..	0 24	19	☽	1 38	2 16	19	W	3 51	4 27	19	F	4 24	4 53	19	M	5 18	5 39	19	W	5 19	5 42
20	F	0 55	1 28	20	M	2 54	3 33	20	Th	4 59	5 26	20	S	5 18	5 40	20	Tu	5 58	6 16	20	Th	6 4	6 25
21	S	2 2	2 36	21	Tu	4 11	4 47	21	F	5 48	6 9	21	☽	5 58	6 15	21	W	6 34	6 52	21	F	6 46	7 6
22	☽	3 10	3 45	22	W	5 21	5 48	22	S	6 28	6 45	22	M	6 31	6 49	22	Th	7 10	7 28	22	S	7 27	7 47
23	M	4 21	4 56	23	Th	6 11	6 32	23	☽	7 2	7 18	23	Tu	7 4	7 20	23	F	7 46	8 4	23	☽	8 7	8 27
24	Tu	5 29	5 57	24	F	6 52	7 11	24	M	7 34	7 49	24	W	7 36	7 52	24	S	8 22	8 40	24	M	8 47	9 7
25	W	6 22	6 46	25	S	7 30	7 47	25	Tu	8 5	8 20	25	Th	8 8	8 25	25	☽	8 58	9 17	25	Tu	9 27	9 48
26	Th	7 9	7 30	26	☽	8 3	8 20	26	W	8 35	8 50	26	F	8 41	8 57	26	M	9 37	9 58	26	W	10 10	10 32
27	F	7 50	8 9	27	M	8 36	8 50	27	Th	9 5	9 20	27	S	9 14	9 32	27	Tu	10 20	10 42	27	Th	10 54	11 17
28	S	8 27	8 45	28	Tu	9 6	9 22	28	F	9 36	9 53	28	☽	9 50	10 8	28	W	11 5	11 31	28	F	11 42	..
29	☽	9 3	9 20	29	W	9 37	9 51	29	S	10 9	10 26	29	M	10 28	10 50	29	Th	..	0 3	29	S	0 9	0 41
30	M	9 36	9 52	30	Th	10 6	10 22	30	☽	10 45	11 7	30	Tu	11 16	11 47	30	F	0 37	1 12	30	☽	1 15	1 49
31	Tu	10 8	10 25	31	F	10 38	10 55					31	W	..	0 22					31	M	2 2	2 55

Hull tides 59 minutes earlier than Goole each day.

TABLE

SHOWING THE NUMBER OF DAYS BETWEEN ANY TWO DATES; ALSO SHOWING THE NUMBER OF DAYS FROM ANY DAY THROUGHOUT THE YEAR TO THE 31ST OF DECEMBER, THE USUAL PERIOD TO WHICH INTEREST IS CALCULATED.

JANUARY.			FEBRUARY.			MARCH.			APRIL.			MAY.			JUNE.		
Jan.	Number.	Days to Dec. 31.	Feb.	Number.	Days to Dec. 31.	Mar.	Number.	Days to Dec. 31.	April	Number.	Days to Dec. 31.	May.	Number.	Days to Dec. 31.	June	Number.	Days to Dec. 31.
1	1	364	1	32	333	1	60	305	1	91	274	1	121	244	1	152	213
2	2	363	2	33	332	2	61	304	2	92	273	2	122	243	2	153	212
3	3	362	3	34	331	3	62	303	3	93	272	3	123	242	3	154	211
4	4	361	4	35	330	4	63	302	4	94	271	4	124	241	4	155	210
5	5	360	5	36	329	5	64	301	5	95	270	5	125	240	5	156	209
6	6	359	6	37	328	6	65	300	6	96	269	6	126	239	6	157	208
7	7	358	7	38	327	7	66	299	7	97	268	7	127	238	7	158	207
8	8	357	8	39	326	8	67	298	8	98	267	8	128	237	8	159	206
9	9	356	9	40	325	9	68	297	9	99	266	9	129	236	9	160	205
10	10	355	10	41	324	10	69	296	10	100	265	10	130	235	10	161	204
11	11	354	11	42	323	11	70	295	11	101	264	11	131	234	11	162	203
12	12	353	12	43	322	12	71	294	12	102	263	12	132	233	12	163	202
13	13	352	13	44	321	13	72	293	13	103	262	13	133	232	13	164	201
14	14	351	14	45	320	14	73	292	14	104	261	14	134	231	14	165	200
15	15	350	15	46	319	15	74	291	15	105	260	15	135	230	15	166	199
16	16	349	16	47	318	16	75	290	16	106	259	16	136	229	16	167	198
17	17	348	17	48	317	17	76	289	17	107	258	17	137	228	17	168	197
18	18	347	18	49	316	18	77	288	18	108	257	18	138	227	18	169	196
19	19	346	19	50	315	19	78	287	19	109	256	19	139	226	19	170	195
20	20	345	20	51	314	20	79	286	20	110	255	20	140	225	20	171	194
21	21	344	21	52	313	21	80	285	21	111	254	21	141	224	21	172	193
22	22	343	22	53	312	22	81	284	22	112	253	22	142	223	22	173	192
23	23	342	23	54	311	23	82	283	23	113	252	23	143	222	23	174	191
24	24	341	24	55	310	24	83	282	24	114	251	24	144	221	24	175	190
25	25	340	25	56	309	25	84	281	25	115	250	25	145	220	25	176	189
26	26	339	26	57	308	26	85	280	26	116	249	26	146	219	26	177	188
27	27	338	27	58	307	27	86	279	27	117	248	27	147	218	27	178	187
28	28	337	28	59	306	28	87	278	28	118	247	28	148	217	28	179	186
29	29	336				29	88	277	29	119	246	29	149	216	29	180	185
30	30	335				30	89	276	30	120	245	30	150	215	30	181	184
31	31	334				31	90	275				31	151	214			

TABLE

SHOWING THE NUMBER OF DAYS BETWEEN ANY TWO DATES, &c.—*continued.*

JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.		
July.	Number.	Days to Dec. 31.	Aug.	Number.	Days to Dec. 31.	Sept.	Number.	Days to Dec. 31.	Oct.	Number.	Days to Dec. 31.	Nov.	Number.	Days to Dec. 31.	Dec.	Number.	Days to Dec. 31.
1	182	183	1	213	152	1	244	121	1	274	91	1	305	60	1	335	30
2	183	182	2	214	151	2	245	120	2	275	90	2	306	59	2	336	29
3	184	181	3	215	150	3	246	119	3	276	89	3	307	58	3	337	28
4	185	180	4	216	149	4	247	118	4	277	88	4	308	57	4	338	27
5	186	179	5	217	148	5	248	117	5	278	87	5	309	56	5	339	26
6	187	178	6	218	147	6	249	116	6	279	86	6	310	55	6	340	25
7	188	177	7	219	146	7	250	115	7	280	85	7	311	54	7	341	24
8	189	176	8	220	145	8	251	114	8	281	84	8	312	53	8	342	23
9	190	175	9	221	144	9	252	113	9	282	83	9	313	52	9	343	22
10	191	174	10	222	143	10	253	112	10	283	82	10	314	51	10	344	21
11	192	173	11	223	142	11	254	111	11	284	81	11	315	50	11	345	20
12	193	172	12	224	141	12	255	110	12	285	80	12	316	49	12	346	19
13	194	171	13	225	140	13	256	109	13	286	79	13	317	48	13	347	18
14	195	170	14	226	139	14	257	108	14	287	78	14	318	47	14	348	17
15	196	169	15	227	138	15	258	107	15	288	77	15	319	46	15	349	16
16	197	168	16	228	137	16	259	106	16	289	76	16	320	45	16	350	15
17	198	167	17	229	136	17	260	105	17	290	75	17	321	44	17	351	14
18	199	166	18	230	135	18	261	104	18	291	74	18	322	43	18	352	13
19	200	165	19	231	134	19	262	103	19	292	73	19	323	42	19	353	12
20	201	164	20	232	133	20	263	102	20	293	72	20	324	41	20	354	11
21	202	163	21	233	132	21	264	101	21	294	71	21	325	40	21	355	10
22	203	162	22	234	131	22	265	100	22	295	70	22	326	39	22	356	9
23	204	161	23	235	130	23	266	99	23	296	69	23	327	38	23	357	8
24	205	160	24	236	129	24	267	98	24	297	68	24	328	37	24	358	7
25	206	159	25	237	128	25	268	97	25	298	67	25	329	36	25	359	6
26	207	158	26	238	127	26	269	96	26	299	66	26	330	35	26	360	5
27	208	157	27	239	126	27	270	95	27	300	65	27	331	34	27	361	4
28	209	156	28	240	125	28	271	94	28	301	64	28	332	33	28	362	3
29	210	155	29	241	124	29	272	93	29	302	63	29	333	32	29	363	2
30	211	154	30	242	123	30	273	92	30	303	62	30	334	31	30	364	1
31	212	153	31	243	122				31	304	61				31	365	

THE ENGLISH MILE COMPARED WITH OTHER EUROPEAN MEASURES.

	English Statute Mile.	English Geog. Mile.	French Kilomètre.	German Geog. Mile.	Russian Verst.
English Statute Mile ..	1·000	0·867	1·609	0·217	1·508
English Geog. Mile	1·153	1·000	1·855	0·250	1·738
Kilomètre	0·621	0·540	1·000	0·135	0·937
German Geog. Mile	4·610	4·000	7·420	1·000	6·953
Russian Verst.....	0·663	0·575	1·067	0·144	1·000
Austrian Mile	4·714	4·089	7·586	1·022	7·112
Dutch Ure	3·458	3·000	5·565	0·750	5·215
Norwegian Mile	7·021	6·091	11·299	1·523	10·589
Swedish Mile	6·644	5·764	10·692	1·441	10·019
Danish Mile	4·682	4·062	7·536	1·016	7·078
Swiss Stunde	2·987	2·592	4·808	0·648	4·505

	Austrian Mile.	Dutch Ure.	Norwegian Mile.	Swedish Mile.	Danish Mile.	Swiss Stunde.
English Statute Mile ..	0·212	0·289	0·142	0·151	0·213	0·335
English Geog. Mile	0·245	0·333	0·164	0·169	0·246	0·386
Kilomètre	0·132	0·180	0·088	0·094	0·133	0·208
German Geog. Mile	0·978	1·333	0·657	0·694	0·985	1·543
Russian Verst	0·141	0·192	0·094	0·100	0·142	0·222
Austrian Mile	1·000	1·363	0·672	0·710	1·006	1·578
Dutch Ure	0·734	1·000	0·493	0·520	0·738	1·157
Norwegian Mile	1·489	2·035	1·000	1·057	1·499	2·350
Swedish Mile.....	1·409	1·921	0·948	1·000	1·419	2·224
Danish Mile	0·994	1·354	0·667	0·705	1·080	1·567
Swiss Stunde	0·634	0·864	0·425	0·449	0·638	1·000

Table Showing the Number of Days from any Day of one Month to the same Day of any other Month.

NUMBER OF DAYS FROM DAY TO DAY.

From to	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
January ..	365	31	59	90	120	151	181	212	243	273	304	334
February..	334	365	28	59	89	120	150	181	212	242	273	303
March....	306	337	365	31	61	92	122	153	184	214	245	275
April.....	275	306	334	365	30	61	91	122	153	183	214	244
May	245	276	304	335	365	31	61	92	123	153	184	214
June.....	214	245	273	304	334	365	30	61	92	122	153	183
July.....	184	215	243	274	304	335	365	31	62	92	123	153
August ...	153	184	212	243	273	304	334	365	31	61	92	122
September	122	153	181	212	242	273	303	334	365	30	61	91
October ..	92	123	151	182	212	243	273	304	335	365	31	61
November.	61	92	120	151	181	212	242	273	304	334	365	30
December.	31	62	90	121	151	182	212	243	274	304	335	365

Example of Use of Table:—To find the number of days *from* 16th August to 27th February. Find August in the side column and February at the top; the number at the intersection, viz., 184, is the number of days from 16th August to 16th February; and 11 (the difference between 16 and 27), and the sum 195 is the number required. Similarly, the number from 16th August to 5th February is 184 less 11, or 173.

TERMS AND ABBREVIATIONS COMMONLY USED IN BUSINESS.

A/c .....Account.
C .....Currency.
$ .....A dollar.
E. E. .....Errors excepted.
E. & O. E. ..Errors and omissions excepted.
F. O. B. ....Free on board (delivered on deck without expense to the ship).
F. P. A. ....Free of particular average.
INST.....Present month.
PROX. .....Next month.
ULT.....Last month.
D/D .....Days after date.
M/D.....Months after date.
D/S .....Days after sight.
%.....Per cent
@ ℔ lb .....At per pound.
B/L .....Bill of lading.
AD VALOREM ..According to value.
AFFIDAVIT ....Statement on oath.
AFFIRMATION..Statement without an oath.
AGIO .....The premium borne by a better sort of money above an inferior.
ASSETS .....A term for property in contradistinction to liabilities.
BANCO.....A continental term for bank money at Hamburg and other places.

DEAD FREIGHT.—The damage payable by one who engages to load a ship fully, and fails to do so.

DEVIATION, in marine insurance, is that divergence from the voyage insured which releases the underwriter from his risk.

DISCOUNT.—An allowance made for payment of money before due.

POLICY.—The document containing the contract of insurance. A *Valued Policy* is when the interest insured is valued. An *Open Policy* is one in which the amount is left for subsequent proof. In an open policy where the value shipped does not equal the value insured, the difference is termed *over insurance;* and the proportionable amount of premium returnable to the insurer is called a *return for short interest.*

PRIMAGE.—A small allowance for the shipmaster's care of goods, now generally included in the freight.

PRO RATA.—Payment in proportion to the various interests concerned.

QUID PRO QUO.—Giving one thing for another.

RESPONDENTIA.—A contract of loan by which goods in a ship are hypothecated to the lender, as in bottomry.

ULLAGE.—The quantity a cask wants of being full.

WEIGHTS AND MEASURES.

Troy Weight.

			Pennywts.		Grains.	*gr.*
		Ounces.	1	=	24	*dwt.*
Pound.	1	=	20	=	480	oz.
1	= 12	=	240	=	5760	lb.

A carat = 4 grains. 100 Troy ounces = $190\frac{5}{7}$ Ounces Avoirdupois.

Avoirdupois Weight.

						dr. Ty. gr.
				oz.		$1 = 27\frac{11}{14}$
			lb.	1 =		$16 = 437\frac{1}{2}$
		st.	1 =	16 =		$256 = 7000$
	qr.	1 =	14 =	224 =	3584	
	cwt.	1 =	2 =	28 =	448 =	7168
Ton.	1 =	4 =	8 =	112 =	1792 =	28672

1 = 20 = 80 = 160 = 2240 = 35840 = 573440

Ton. cwt. qr. st. lb. oz. dr. gr.

A Cental = 100 pounds. 100 Ounces Avoirdupois = $91\frac{7}{18}$ Ounces Troy.

The Apothecaries' Weight is now the same as the Avoirdupois.

Lineal Measure, or Measure of Length.

						ft.	in.
					yds.	1 =	12
				pl.	1 =	3 =	36
			ch.	1 =	$5\frac{1}{2}$ =	$16\frac{1}{2}$ =	198
		fur.	1 =	4 =	22 =	66 =	792
Mile.	1 =	10 =	40 =	220 =	660 =	7920	
1	= 8 =	80 =	320 =	1760 =	5280 =	63360	

A league = 3 miles. A hand = 4 inches. A fathom = 6 feet.

Geographical degree = 60 geographical or nautical miles = 69·121 imperial miles.

Geographical mile = 1·150 imperial miles. A military pace = $2\frac{1}{2}$ feet.

Solid or Cubic Measure.

	Cubic feet.		Cubic inches.
Cubic yard.	1	=	1728
1 =	27	=	46656

1 Ton of Shipping = 40 cubic feet.
1 Barrel Bulk = 5 cubic feet.

Liquid Measure of Capacity.

			Pints.		Gills.
	Quarts.		1	—	4
Gallon.	1	=	2	=	8
1 =	4	=	8	=	32

A hogshead (hhd.) contains 63 gallons. A pipe is 2 hogsheads, and 2 pipes form a tun. All liquids are measured by this table.

Grain Measure, &c., or Dry Measure of Capacity.

			Pecks.		Gallons.
	Bushels.		1	=	2
Quarter.	1	=	4	=	8
1 =	8	=	32	=	64

1 Boll of Wheat = 4 bushels nearly.
1 Boll of Barley = 6 „ „
5 Bushels are a sack.
5 Quarters make a load.

Square or Land Measure.

					Sq. feet.	Sq. in.
				Sq. yards.	1 =	144
			Sq. poles.	1 =	9 =	1296
		Sq. roods.	1 =	$30\frac{1}{4}$ =	$272\frac{1}{4}$ =	39204
Sq. acre.	1 =	40 =	1210 =	10890 =	1568160	
1 =	4 =	160 =	4840 =	43560 =	6272640	

1 square mile = 640 acres: 36 square yards = 1 rood of building: 100 sq. feet = 1 square of flooring: $272\frac{1}{4}$ sq. feet = 1 rood of bricklayer's work. The chain with which land is measured is 22 yards long, and 1 sq. chain = 10,000 sq. links, contains $22 \times 22 = 484$ sq. yards: 10 sq. chains = 1 acre.

Table of Time.

				Minutes.	Seconds.
		Hours.	1 =		60
	Days.	1 =	60 =		3600
Week.	1 =	24 =	1440 =		86400
1 =	7 =	168 =	10080 =		604800

1 Common Year = 365 days, or 52 weeks 1 day.
1 Leap Year = 366 days, or 52 weeks 2 days.
1 Solar Year = 365 days 5 hours 48 minutes 49 seconds.

Geographical or Nautical Measure.

1 Geographical mile = $\left\{\begin{array}{l}1\frac{3}{20} \text{ imperial mile of} \\ 6{,}076 \text{ feet.}\end{array}\right.$
3 „ miles = 1 league.
60 „ miles = $\left\{\begin{array}{l}1 \text{ degree, marked} \\ deg. \text{ or } [^\circ]\end{array}\right.$
360 Geog. degs. or about 24,855½ imp. miles = $\left\{\begin{array}{l}\text{Circumference of} \\ \text{the earth.}\end{array}\right.$

Bread Weight.

	lb.	oz.
A Peck Loaf weighs	17	$6\frac{1}{2}$
A Half Peck Loaf	8	11
A Quartern Loaf	4	5
A Peck or Stone of Flour	14	0
A Bushel of Flour	56	6
A Sack of Flour, or 5 Bushels	280	0

Useful Weights.

The following Table will be found useful when it is desired to ascertain the weight of a letter or other article, and suitable weights are not at hand. The weight given is that of coins fairly worn; allowance must be made if those used be new or very old.

$\frac{1}{4}$ oz. . . . Halfpenny and threepenny piece.
$\frac{1}{2}$ „ . . . . One penny piece.
$\frac{1}{2}$ „ . . . . Florin and sixpence.
1 „ . . . . Three pennies.
2 „ . . . . 4 half-crowns and one shilling.
4 „ . . . . 4 florins, 4 half-crowns, $2\frac{1}{2}$ pennies.

Books.

	Pages.	Leaves.	Sheet.
Folio Books	4 or 2	make	1
Quarto, or 4to.	8 „	4 „	1
Octavo, or 8vo.	16 „	8 „	1
Duodecimo, or 12mo.	24 „	12 „	1
Octodecimo, or 18mo.	36 „	18 „	1

24mo., 32mo., 48mo., 72mo., &c., &c.

A READY RECKONER.

No.	¼d.	½d.	¾d.	1d.	2d.	3d.	4d.	5d.	6d.	7d.	8d.	9d.	10d.	11d.	No.
1	0 0 0¼	0 0½	0 0¾	0 1	0 2	0 3	0 4	0 5	0 6	0 7	0 8	0 9	0 10	0 11	1
2	0 0½	0 1	0 1½	0 2	0 4	0 6	0 8	0 10	1 0	1 2	1 4	1 6	1 8	1 10	2
3	0 0¾	0 1½	0 2¼	0 3	0 6	0 9	1 0	1 3	1 6	1 9	2 0	2 3	2 6	2 9	3
4	0 1	0 2	0 3	0 4	0 8	1 0	1 4	1 8	2 0	2 4	2 8	3 0	3 4	3 8	4
5	0 1¼	0 2½	0 3¾	0 5	0 10	1 3	1 8	2 1	2 6	2 11	3 4	3 9	4 2	4 7	5
6	0 1½	0 3	0 4½	0 6	1 0	1 6	2 0	2 6	3 0	3 6	4 0	4 6	5 0	5 6	6
7	0 1¾	0 3½	0 5¼	0 7	1 2	1 9	2 4	2 11	3 6	4 1	4 8	5 3	5 10	6 5	7
8	0 2	0 4	0 6	0 8	1 4	2 0	2 8	3 4	4 0	4 8	5 4	6 0	6 8	7 4	8
9	0 2¼	0 4½	0 6¾	0 9	1 6	2 3	3 0	3 9	4 6	5 3	6 0	6 9	7 6	8 3	9
10	0 2½	0 5	0 7½	0 10	1 8	2 6	3 4	4 2	5 0	5 10	6 8	7 6	8 4	9 2	10
11	0 2¾	0 5½	0 8¼	0 11	1 10	2 9	3 8	4 7	5 6	6 5	7 4	8 3	9 2	10 1	11
12	0 3	0 6	0 9	1 0	2 0	3 0	4 0	5 0	6 0	7 0	8 0	9 0	10 0	11 0	12
13	0 3¼	0 6½	0 9¾	1 1	2 2	3 3	4 4	5 5	6 6	7 7	8 8	9 9	10 10	11 11	13
14	0 3½	0 7	0 10½	1 2	2 4	3 6	4 8	5 10	7 0	8 2	9 4	10 6	11 8	12 10	14
15	0 3¾	0 7½	0 11¼	1 3	2 6	3 9	5 0	6 3	7 6	8 9	10 0	11 3	12 6	13 9	15
16	0 4	0 8	1 0	1 4	2 8	4 0	5 4	6 8	8 0	9 4	10 8	12 0	13 4	14 8	16
17	0 4¼	0 8½	1 0¾	1 5	2 10	4 3	5 8	7 1	8 6	9 11	11 4	12 9	14 2	15 7	17
18	0 4½	0 9	1 1½	1 6	3 0	4 6	6 0	7 6	9 0	10 6	12 0	13 6	15 0	16 6	18
19	0 4¾	0 9½	1 2¼	1 7	3 2	4 9	6 4	7 11	9 6	11 1	12 8	14 3	15 10	17 5	19
20	0 5	0 10	1 3	1 8	3 4	5 0	6 8	8 4	10 0	11 8	13 4	15 0	16 8	18 4	20
21	0 5¼	0 10½	1 3¾	1 9	3 6	5 3	7 0	8 9	10 6	12 3	14 0	15 9	17 6	19 3	21
22	0 5½	0 11	1 4½	1 10	3 8	5 6	7 4	9 2	11 0	12 10	14 8	16 6	18 4	20 2	22
23	0 5¾	0 11½	1 5¼	1 11	3 10	5 9	7 8	9 7	11 6	13 5	15 4	17 3	19 2	21 1	23
24	0 6	1 0	1 6	2 0	4 0	6 0	8 0	10 0	12 0	14 0	16 0	18 0	20 0	22 0	24
25	0 6¼	1 0½	1 6¾	2 1	4 2	6 3	8 4	10 5	12 6	14 7	16 8	18 9	20 10	22 11	25
26	0 6½	1 1	1 7½	2 2	4 4	6 6	8 8	10 10	13 0	15 2	17 4	19 6	21 8	23 10	26
27	0 6¾	1 1½	1 8¼	2 3	4 6	6 9	9 0	11 3	13 6	15 9	18 0	20 3	22 6	24 9	27
28	0 7	1 2	1 9	2 4	4 8	7 0	9 4	11 8	14 0	16 4	18 8	21 0	23 4	25 8	28
29	0 7¼	1 2½	1 9¾	2 5	4 10	7 3	9 8	12 1	14 6	16 11	19 4	21 9	24 2	26 7	29
30	0 7½	1 3	1 10½	2 6	5 0	7 6	10 0	12 6	15 0	17 6	20 0	22 6	25 0	27 6	30
33	0 8¼	1 4½	2 0¾	2 9	5 6	8 3	11 0	13 9	16 6	19 3	22 0	24 9	27 6	30 3	33
36	0 9	1 6	2 3	3 0	6 0	9 0	12 0	15 0	18 0	21 0	24 0	27 0	30 0	33 0	36
40	0 10	1 8	2 6	3 4	6 8	10 0	13 4	16 8	20 0	23 4	26 8	30 0	33 4	36 8	40
42	0 10½	1 9	2 7¾	3 6	7 0	10 6	14 0	17 6	21 0	24 6	28 0	31 6	35 0	38 6	42
45	0 11¼	1 10½	2 9¾	3 9	7 6	11 3	15 0	18 9	22 6	26 3	30 0	33 9	37 6	41 3	45
48	1 0	2 0	3 0	4 0	8 0	12 0	16 0	20 0	24 0	28 0	32 0	36 0	40 0	44 0	48
50	1 0½	2 1	3 1½	4 2	8 4	12 6	16 8	20 10	25 0	29 2	33 4	37 6	41 8	45 10	50
51	1 0¾	2 1½	3 2¼	4 3	8 6	12 9	17 0	21 3	25 6	29 9	34 0	38 3	42 6	46 9	51
52	1 1	2 2	3 3	4 4	8 8	13 0	17 4	21 8	26 0	30 4	34 8	39 0	43 4	47 8	52
53	1 1¼	2 2½	3 3¾	4 5	8 10	13 3	17 8	22 1	26 6	30 11	35 4	39 9	44 2	48 7	53
54	1 1½	2 3	3 4½	4 6	9 0	13 6	18 0	22 6	27 0	31 6	36 0	40 6	45 0	49 6	54
56	1 2	2 4	3 6	4 8	9 4	14 0	18 8	23 4	28 0	32 8	37 4	42 0	46 8	51 4	56
60	1 3	2 6	3 9	5 0	10 0	15 0	20 0	25 0	30 0	35 0	40 0	45 0	50 0	55 0	60

WAGES TABLE.

Per Year.	Per Month	Per Week.	Per Day.	Per Year.	Per Month.	Per Week	Per Day.	Per Year.	Per Month.	Per Week.	Per Day.
£ s.	s. d.	s. d.	s. d.	£ s.	£ s. d.	s. d.	s. d.	£ s.	£ s. d.	£ s. d.	£ s. d.
0 10	0 10	0 2¼	0 0¼	8 0	0 13 4	3 1	0 5¼	18 0	1 10 0	0 6 11	0 0 11¾
1 0	1 8	0 4½	0 0¾	8 8	0 14 0	3 2¾	0 5½	18 18	1 11 6	0 7 3¼	0 1 0¼
1 10	2 6	0 7	0 1	8 10	0 14 2	3 3¼	0 5¾	19 0	1 11 8	0 7 3¾	0 1 0½
2 0	3 4	0 9¼	0 1¼	9 0	0 15 0	3 5¼	0 6	20 0	1 13 4	0 7 8¾	0 1 1¼
2 2	3 6	0 9¾	0 1⅓	9 9	0 15 9	3 7½	0 6¼	30 0	2 10 0	0 11 6½	0 1 7¾
2 10	4 2	0 11¼	0 1¾	10 0	0 16 8	3 10¼	0 6½	40 0	3 6 8	0 15 4½	0 2 2¼
3 0	5 0	1 1¼	0 2	10 10	0 17 6	4 0¼	0 7	50 0	4 3 4	0 19 2¾	0 2 9
3 3	5 3	1 2½	0 2	11 0	0 18 4	4 3¾	0 7¼	60 0	5 0 0	1 3 1	0 3 3½
3 10	5 10	1 4¼	0 2¼	11 11	0 19 3	4 5¼	0 7½	70 0	5 16 8	1 6 11	0 3 10
4 0	6 8	1 6¼	0 2⅓	12 0	1 0 0	4 7½	0 8	80 0	6 13 4	1 10 9½	0 4 4½
4 4	7 0	1 7½	0 2¾	12 12	1 1 0	4 10¼	0 8¼	90 0	7 10 0	1 14 7½	0 4 11¼
4 10	7 6	1 8¾	0 3	13 0	1 1 8	5 0	0 8½	100 0	8 6 8	1 18 5¼	0 5 5¾
5 0	8 4	1 11	0 3¼	13 13	1 2 9	5 3	0 9	200 0	16 13 4	3 16 11	0 10 11½
5 5	8 9	2 0¼	0 3½	14 0	1 3 4	5 4¾	0 9¼	300 0	25 0 0	5 15 4½	0 16 5¼
5 10	9 2	2 1½	0 3¾	14 14	1 4 6	5 7¾	0 9½	400 0	33 6 8	7 13 10¼	1 1 11
6 0	10 0	2 3¼	0 4	15 0	1 5 0	5 9¼	0 9¾	500 0	41 13 4	9 12 3¾	1 7 4¾
6 6	10 6	2 5	0 4¼	15 15	1 6 3	6 0¾	0 10¼	600 0	50 0 0	11 10 9¾	1 12 10½
6 10	10 10	2 6	0 4¼	16 0	1 6 8	6 1¾	0 10½	700 0	58 6 8	13 9 2¾	1 18 4¼
7 0	11 8	2 8¾	0 4⅓	16 16	1 8 0	6 5½	0 11	800 0	66 13 4	15 7 8¼	2 3 10
7 7	12 3	2 10	0 4¾	17 0	1 8 4	6 6¾	0 11¼	900 0	75 0 0	17 6 1¾	2 9 3¾
7 10	12 6	2 10½	0 5	17 17	1 9 9	6 10½	0 11¾	1000 0	83 6 8	19 4 7¼	2 14 9½

PRINCIPAL ARTICLES OF THE CALENDAR,

FOR THE YEAR 1900.

Golden Number	1	Dominical Letter	G
Solar Cycle	5	Roman Indiction	13
Epact	29		

Year 6613 of the Julian Period.
„ 1904 from the Birth of Christ.
„ 2653 „ „ Foundation of Rome according to Varron.
„ 7408 of the World (Constantinopolitan account).
„ 7392 „ „ (Alexandrian account).
„ 5661 of the Jewish Era commences on September 24th, 1900.
Year 1318 of the Mahommedan Era commences on May 1st, 1900.
Ramadân (Month of Abstinence observed by the Turks) commences on January 3rd, 1900, and again on December 23rd, 1900.

FIXED AND MOVABLE FESTIVALS, ANNIVERSARIES, ETC.

Epiphany	Jan. 6	Ascension Day	May 24
Septuagesima Sunday	Feb. 11	Pentecost—Whit Sunday	June 3
Quinquagesima Sunday	„ 25	Trinity Sunday	„ 10
Ash Wednesday	„ 28	Corpus Christi	„ 14
First Sunday in Lent	Mar. 4	Accession of Queen Vict.(1837)	„ 20
St. Patrick	„ 17	St.John Baptist—Midsummer Day	„ 24
Lady Day	„ 25	St. Michael—Michaelmas Day	Sept.29
Palm Sunday	April 8	Prince of Wales born (1841)	Nov. 9
Good Friday	„ 13	St. Andrew	„ 30
Easter Sunday	„ 15	Christmas Day (Monday)	Dec. 25
Queen Victoria born (1819)	May 24		

THE FOUR QUARTERS OF THE YEAR.

	H.	M.	
Spring Quarter begins March 21st	1	39	morning.
Summer „ „ June 21st	9	39	afternoon.
Autumn „ „ September 23rd	0	20	„
Winter „ „ December 22nd	6	42	morning.

REGISTERS OF BIRTHS, MARRIAGES, AND DEATHS.

These are now kept at Somerset House, and may be searched on payment of the fee of one shilling. If a certified copy of any entry be required, the charge for that, in addition to the shilling for the search, is two shillings and sevenpence, which includes a penny for stamp duty. The registers contain an entry of births, deaths, and marriages since 1st July, 1837.

BANK HOLIDAYS, 1900.

ENGLAND.

Easter Monday	April 16
Whit Monday	June 4
First Monday in August	August 6
Boxing Day (Wednesday)	December 26

SCOTLAND.

New Year's Day	January 1
Good Friday	April 13
First Monday in May	May 7
First Monday in August	August 6
Christmas Day	December 25

LAW SITTINGS, 1900.

	Begin.	End.
Hilary Sittings	January 11	April 11
Easter „	April 24	June 1
Trinity „	June 12	August 11
Michael. „	October 24	December 21

ECLIPSES, 1900.

In the year 1900 there will be two Eclipses of the Sun and one of the Moon:—

A Total Eclipse of the Sun, May 28th, visible as a Partial Eclipse at Greenwich.

A Partial Eclipse of the Moon, June 13th, visible at Greenwich.

An Annular Eclipse of the Sun, November 22nd, invisible at Greenwich.

Calendar for 1900.

January.

S	...	7	14	21	28
M	1	8	15	22	29
Tu	2	9	16	23	30
W	3	10	17	24	31
Th	4	11	18	25	...
F	5	12	19	26	...
S	6	13	20	27	...

February.

S	...	4	11	18	25
M	...	5	12	19	26
Tu	...	6	13	20	27
W	...	7	14	21	28
Th	1	8	15	22	...
F	2	9	16	23	...
S	3	10	17	24	...

March.

S	...	4	11	18	25
M	...	5	12	19	26
Tu	...	6	13	20	27
W	...	7	14	21	28
Th	1	8	15	22	29
F	2	9	16	23	30
S	3	10	17	24	31

April.

S	1	8	15	22	29
M	2	9	16	23	30
Tu	3	10	17	24	...
W	4	11	18	25	...
Th	5	12	19	26	...
F	6	13	20	27	...
S	7	14	21	28	...

May.

S	...	6	13	20	27
M	...	7	14	21	28
Tu	1	8	15	22	29
W	2	9	16	23	30
Th	3	10	17	24	31
F	4	11	18	25	...
S	5	12	19	26	...

June.

S	...	3	10	17	24
M	...	4	11	18	25
Tu	...	5	12	19	26
W	...	6	13	20	27
Th	...	7	14	21	28
F	1	8	15	22	29
S	2	9	16	23	30

July.

S	1	8	15	22	29
M	2	9	16	23	30
Tu	3	10	17	24	31
W	4	11	18	25	...
Th	5	12	19	26	...
F	6	13	20	27	...
S	7	14	21	28	...

August.

S	...	5	12	19	26
M	...	6	13	20	27
Tu	...	7	14	21	28
W	1	8	15	22	29
Th	2	9	16	23	30
F	3	10	17	24	31
S	4	11	18	25	...

September.

S	...	2	9	16	23	30
M	...	3	10	17	24	...
Tu	...	4	11	18	25	...
W	...	5	12	19	26	...
Th	...	6	13	20	27	...
F	...	7	14	21	28	...
S	1	8	15	22	29	...

October.

S	...	7	14	21	28
M	1	8	15	22	29
Tu	2	9	16	23	30
W	3	10	17	24	31
Th	4	11	18	25	...
F	5	12	19	26	...
S	6	13	20	27	...

November.

S	...	4	11	18	25
M	...	5	12	19	26
Tu	...	6	13	20	27
W	...	7	14	21	28
Th	1	8	15	22	29
F	2	9	16	23	30
S	3	10	17	24	...

December.

S	...	2	9	16	23	30
M	...	3	10	17	24	31
Tu	...	4	11	18	25	...
W	...	5	12	19	26	...
Th	...	6	13	20	27	...
F	...	7	14	21	28	...
S	1	8	15	22	29	...

January.

SUNRISE AND SUNSET.

1st	Rises at..	8 8	Sets at..	3 59	15th Rises at..	8 2	Sets at.. 4 18
8th	„ ..	8 6	„ ..	4 8	22nd „ ..	7 55	„ .. 4 29

29th Rises at 7 46. Sets at 4 41.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises	7 51 morn.	Sets	4 11 aft.	15th Rises	4 25 aft.	Sets 7 28 morn.
8th	„	10 58 morn.	„	0 27 morn.	22nd „	0 0 morn.	„ 9 46 morn.

29th Rises 6 23 morn. Sets 3 0 aft.

New Moon, 1st	1 51 aft.	Full Moon, 15th	7 7 aft.
First Quarter 8th	5 39 morn.	Last Quarter, 23rd.....	11 52 „

New Moon, 31st, 1 22 morn.

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	M		*New Year's Day.*
2	Tu	1868	DECIDED TO START SCOTTISH WHOLESALE SOCIETY.
3	W	1803	Douglas Jerrold born.
4	Th	1863	Working Men's College, London, opened.
5	F	1824	Sir J. Hibbert born.
6	S		*Epiphany.*
7	S	1826	Lord Kimberley born.
8	M		*Cambridge Lent Term begins.*
9	Tu		Fire Insurance expires.
10	W	1840	Penny Post commenced.
11	Th	1866	Wreck of the "London."
12	F	1887	Lord Iddesleigh died.
13	S	1873	*Crumpsall Works purchased.*
14	S		*2nd Sunday after Epiphany.*
15	M	1877	*Cork Branch established. Oxford Lent Term begins.*
16	Tu	1888	M. Godin, of Guise, died.
17	W	1706	Benjamin Franklin born.
18	Th	1890	James Hilton, director C.W.S., died.
19	F	1813	Sir H. Bessemer born.
20	S	1779	David Garrick died.
21	S	1829	Oscar II. of Sweden born.
22	M	1788	Byron born.
23	Tu	1875	Canon Kingsley died.
24	W	1800	Sir E. Chadwick born.
25	Th	1759	Robert Burns born.
26	F	1896	Lord Leighton died.
27	S	1859	Emperor of Germany born.
28	S	1871	Paris capitulated.
29	M	1737	T. Payne born.
30	Tu	1880	*Steamship "Plover" sold.*
31	W	1892	Rev. C. H. Spurgeon died.

February.

SUNRISE AND SUNSET.

1st	Rises at..	7 41	Sets at..	4 47	15th Rises at..	7 17	Sets at.. 5 12
8th	„ ..	7 30	„ ..	5 0	22nd „ ..	7 4	„ .. 5 25

28th Rises at 6 51. Sets at 5 36.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises 7 55 morn.		Sets 7 19 aft.		15th Rises 6 43 aft.		Sets 7 2 morn.
8th	„ 11 20 „		„ 3 9 morn.		22nd „ 1 24 morn.		„ 9 40 „

28th Rises 5 53 morn. Sets 4 43 aft.

First Quarter, 6th ..... 4 23 aft. | Full Moon, 14th ..... 1 50 aft.
Last Quarter, 22nd, 4 44 aft.

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	Th	1878	Geo. Cruikshank died.
2	F	1874	*Tralee Branch opened.*
3	S	1830	Marquis of Salisbury born.
4	S	1874	Coomassie captured.
5	M	1881	Thomas Carlyle died.
6	Tu	1838	Henry Irving born.
7	W	1812	Charles Dickens born.
8	Th		Half Quarter Day.
9	F	1838	General Sir H. Evelyn Wood born.
10	S	1897	*New Northampton Saleroom opened.*
11	S	1826	London University founded.
12	M	1814	Custom House (London) burnt.
13	Tu	1849	Lord Randolph Churchill born.
14	W	1876	*Opening of Newcastle Building, Waterloo Street.* *St. Valentine.*
15	Th	1899	T. Swann, director C.W.S., died.
16	F	1823	Li Hung Chang born.
17	S	1841	Duchess of Albany born.
18	S	1889	*Enderby Extension opened.*
19	M	1891	Battle at Tokar.
20	Tu	1855	Joseph Hume died.
21	W	1879	*"Pioneer" launched. New York Branch estab., 1876.*
22	Th	1845	Rev. Sydney Smith died.
23	F	1848	French Revolution.
24	S		*St. Matthias.*
25	S	1878	KILMARNOCK BRANCH, SCOTTISH C.W.S., OPENED. Thos. Blandford died, 1899.
26	M	1852	Wreck of the "Birkenhead."
27	Tu		*Shrove Tuesday.*
28	W		*Ash Wednesday.*

March.

SUNRISE AND SUNSET.

1st Rises at.. 6 49 Sets at.. 5 37 | 15th Rises at.. 6 17 Sets at.. 6 2
8th „ .. 6 33 „ .. 5 50 | 22nd „ .. 6 2 „ .. 6 14
29th Rises at 5 45. Sets at 6 25.

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises 6 18 morn. Sets 6 12 aft. | 15th Rises 5 38 aft. Sets 5 26 morn.
8th „ 10 8 „ „ 1 58 morn. | 22nd „ 0 17 morn. „ 8 23 „
29th Rises 4 41 morn. Sets 5 5 aft.

New Moon, 1st ..... 11 25 morn. | Full Moon, 16th ..... 8 11 morn.
First Quarter, 8th ..... 5 34 „ | Last Quarter, 24th ..... 5 36 „
New Moon, 30th, 8 30 aft.

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	Th	1869	*1, Balloon Street, Manchester, Warehouse opened.*
2	F	1791	John Wesley died.
3	S	1877	George Odger died.
4	S		*1st Sunday in Lent.*
5	M	1886	R. Whittle, director C.W.S., died.
6	Tu	1898	S. Bamford, editor of *Co-operative News*, died.
7	W	1883	Green, historian, died.
8	Th	1828	Sir Richard Temple born.
9	F	1874	*London Branch established.*
10	S	1863	Prince of Wales married.
11	S		*2nd Sunday in Lent.*
12	M	1682	Chelsea Hospital founded.
13	Tu	1830	J. L. Toole born.
14	W	1864	*Wholesale Society commenced business.* BATLEY MILL COMMENCED, 1887.
15	Th	1860	HECKMONDWIKE CO-OPERATIVE SOCIETY COMMENCED.
16	F	1895	J. T. W. Mitchell, Chairman of Directors, C.W.S., d.
17	S		*St. Patrick's Day.*
18	S		*3rd Sunday in Lent.*
19	M	1876	General Chesney died.
20	Tu		Spring begins.
21	W	1871	Princess Louise married.
22	Th	1896	Judge Hughes died.
23	F	1824	National Gallery founded.
24	S	1879	*Rouen Branch opened.*
25	S		*Lady Day. 4th Sunday in Lent.*
26	M	1819	Duke of Cambridge born.
27	Tu		*Cambridge Lent Term ends.*
28	W	1861	United States Civil War began.
29	Th	1879	*Trial trip s.s. "Pioneer."*
30	F	1848	Don Carlos born.
31	S	1844	Andrew Lang born.

April.

SUNRISE AND SUNSET.

1st	Rises at..	5 39	Sets at.. 6 30	15th	Rises at..	5 8	Sets at.. 6 54
8th	„ ..	5 23	„ .. 6 43	22nd	„ ..	4 53	„ .. 7 5

29th Rises at 4 39. Sets at 7 17.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises	5 58 morn.	Sets 9 18 aft.	15th	Rises	7 56 aft.	Sets 4 49 morn.
8th	„	0 12 aft.	„ 2 30 morn.	22nd	„	1 23 morn.	„ 10 34 „

29th Rises 4 24 morn. Sets 8 8 aft.

First Quarter, 6th	8 54 aft.	Last Quarter, 22nd	2 33 aft.
Full Moon, 15th	1 2 morn.	New Moon, 29th	5 23 morn.

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	S		*5th Sunday in Lent.* Littleboro' Flannel Mill acquired, 1898.
2	M	1875	*Liverpool Depôt commenced.* R. Allen, director C.W.S., died, 1877.
3	Tu	1875	Tower of London opened free.
4	W	1774	Oliver Goldsmith died.
5	Th		*Dividends due.*
6	F	1812	Badajos taken. [*ends.*
7	S	1884	*Hamburg Branch commenced. Oxford Lent Term*
8	S		*Palm Sunday.* King of Denmark born, 1818.
9	M	1877	LEITH BRANCH, SCOTTISH WHOLESALE, OPENED.
10	Tu	1858	Trial of Dr. Bernard.
11	W	1814	Napoleon abdicated.
12	Th	1782	Admiral Rodney's victory.
13	F	1872	Samuel Bamford died.
14	S	1873	*Armagh Branch opened.*
15	S		*Easter Sunday.*
16	M		*Bank Holiday.*
17	Tu	1790	Dr. B. Franklin died.
18	W	1891	*Dunston Corn Mill opened.*
19	Th	1881	Lord Beaconsfield died.
20	F	1868	SCOTTISH CO-OPERATIVE WHOLESALE S. ENROLLED.
21	S	1662	Royal Society founded.
22	S		*Low Sunday. Nottingham Saleroom opened, 1886.*
23	M		*St. George.*
24	Tu	1866	*Tipperary Branch opened.*
25	W	1844	ROCHDALE PIONEERS' SOCIETY COMMENCED.
26	Th	1841	Dr. Boyd Carpenter born.
27	F	1840	First Stone of Houses of Parliament laid.
28	S	1789	Mutiny on the "Bounty."
29	S	1856	Russian War ended.
30	M	1875	Artisans' Dwellings Act.

May.

SUNRISE AND SUNSET.

1st	Rises at..	4 35	Sets at.. 7 20	15th	Rises at..	4 11	Sets at.. 7 42
8th	„ ..	4 23	„ .. 7 31	22nd	„ ..	4 2	„ .. 7 52

29th Rises at 3 54. Sets at 8 1.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises 5 47 morn.		Sets 10 25 aft.	15th	Rises 9 3 aft.		Sets 4 22 morn.
8th	„ 1 18 aft.		„ 1 37 morn.	22nd	„ 0 45 morn.		„ 0 20 aft.

29th Rises 4 27 morn. Sets 9 7 aft.

First Quarter, 6th	1 39 aft.	Last Quarter, 21st	8 30 aft.
Full Moon, 14th	3 36 „	New Moon, 28th	2 49 „

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	Tu	1892	J. Thirlaway, director C.W.S., died.
2	W	1868	Thames Embankment opened.
3	Th		Royal Academy opens.
4	F	1876	Strike at Constantinople.
5	S	1892	*Birmingham Saleroom opened.*
6	S	1882	Lord Cavendish assassinated.
7	M	1812	Robert Browning born.
8	Tu	1893	*Broughton Cabinet Factory opened.*
9	W	1873	John Stuart Mill died. Half Quarter day. *Tobacco*
10	Th	1816	Bishop of Liverpool born. *manufacturing commenced.*
11	F	1812	Spencer Percival shot.
12	S	1869	Co-op. Printing Society, Manchester, com. business.
13	S		*4th Sunday after Easter.*
14	M		*Old May Day.*
15	Tu	1847	Daniel O'Connell died.
16	W	1871	Vendome Column destroyed.
17	Th	1862	Earl Canning died.
18	F	1888	S. Lever, director C.W.S., died.
19	S	1898	W. E. Gladstone died.
20	S	1506	Christopher Columbus died.
21	M	1841	Canton taken.
22	Tu	1870	Mark Lemon died.
23	W	1498	Savonarola burned.
24	Th	1876	*Purchase of s.s. "Plover."*
25	F	1890	J. Atkinson, director C.W.S., died.
26	S	1867	Duchess of York born.
27	S	1873	Macready died.
28	M	1878	Earl Russell died.
29	Tu	1660	The Restoration.
30	W	1878	Voltaire died.
31	Th	1884	*Leicester Works Second Extension opened.*

June.

SUNRISE AND SUNSET.

1st	Rises at..	3 51	Sets at.. 8 4	15th	Rises at..	3 44	Sets at.. 8 16
8th	„ ..	3 47	„ .. 8 11	22nd	„ ..	3 45	„ .. 8 18

29th Rises at 3 47. Sets at 8 18.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises 7 41 morn.		Sets 10 58 aft.	15th	Rises 9 59 aft.		Sets 6 12 morn.
8th	„ 3 28 aft.		„ 0 55 morn.	22nd	„ 0 25 morn.		„ 3 28 aft.

29th Rises 6 32 morn. Sets 9 25 aft.

First Quarter, 5th	6 58 morn.	Last Quarter, 20th	0 57 morn.
Full Moon, 13th	3 38 „	New Moon, 27th	1 27 „

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	F	1794	Lord Howe's victory.
2	S	1865	(3) Duke of York born.
3	S		*Whit Sunday.*
4	M		*Bank Holiday.*
5	Tu	1723	Adam Smith born.
6	W	1861	Cavour died.
7	Th	1832	Reform Bill passed.
8	F	1878	Alexandra Palace burnt.
9	S	1870	Charles Dickens died.
10	S		*Trinity Sunday.*
11	M		*St. Barnabas.*
12	Tu	1819	Charles Kingsley born.
13	W	1795	Dr. Arnold, of Rugby, born.
14	Th	1800	Battle of Marengo.
15	F	1875	*Manchester Drapery Warehouse, Dantzic St., opened.*
16	S	1815	Battle of Quatre Bras.
17	S	1775	Battle of Bunker's Hill.
18	M	1876	W. PARE, FIRST SEC. OF CONGRESS BOARD, died.
19	Tu	1864	Alabama sunk.
20	W	1837	Queen's Accession.
21	Th	1884	JOS. SMITH, ASSISTANT SEC. CONGRESS BOARD, died.
22	F	1893	Loss of H.M.S. "Victoria."
23	S	1757	Battle of Plassy.
24	S		*Midsummer Day.*
25	M	1884	*Newcastle Drapery Warehouse opened.* E. Hibbert, director C.W.S., died, 1895.
26	Tu	1826	General Sir M. Dillon born.
27	W	1857	Cawnpore taken.
28	Th	1831	Dr. Josef Joachim born.
29	F	1842	Sir P. O'Brien born.
30	S	1879	*Goole Forwarding Depôt opened.*

July.

SUNRISE AND SUNSET.

1st	Rises at..	3 49	Sets at.. 8 18	15th	Rises at..	4 1	Sets at.. 8 9
8th	„ ..	3 54	„ .. 8 15	22nd	„ ..	4 10	„ .. 8 1

29th Rises at 4 20. Sets at 7 52.

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises 8 48 morn.	Sets 10 4 aft.	15th Rises 9 19 aft.	Sets 7 53 morn.
8th „ 4 32 aft.	„ 0 15 morn.	22nd „ 0 15 morn.	„ 4 47 aft.

29th Rises 7 40 morn. Sets 8 29 aft.

First Quarter, 5th	0 13 morn.	Last Quarter, 19th	5 31 morn.
Full Moon, 12th	1 21 aft.	New Moon, 26th	1 42 aft.

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	S	1872	*Manchester Boot and Shoe Department commenced.*
2	M	1867	EQUITABLE CO-OP. BUILDING SOCIETY ESTABLISHED.
3	Tu	1881	DUNDEE BRANCH OF SCOTTISH C.W.S. OPENED.
4	W	1776	Independence Day, U.S.A.
5	Th	1853	Cecil J. Rhodes born.
6	F		*Old Midsummer Day.*
7	S	1888	*Launch of s.s. "Equity."*
8	S	1819	Sir L. Mc.Clintock born.
9	M		*Fire Insurance expires.*
10	Tu	1509	John Calvin born.
11	W	1898	*Longsight Printing Works commenced.*
12	Th	1869	*Limerick Branch opened.*
13	F	1872	Ballot Act in operation.
14	S	1873	*Waterford Branch opened.*
15	S		*St. Swithin.*
16	M	1876	*Manchester Furnishing Department opened.*
17	Tu	1845	Earl Grey died.
18	W	1881	Dean Stanley died.
19	Th	1884	Duke of Albany born.
20	F	1873	Lord Westbury died.
21	S	1887	*Manchester New Furnishing Warehouse opened.*
22	S		[*Purchase of s.s. "Marianne Briggs," 1883.*
23	M	1833	Duke of Devonshire born.
24	Tu	1851	Window Tax repealed.
25	W	1883	Captain Webb drowned.
26	Th	1832	Justice Kekewich born.
27	F	1880	*Purchase of s.s. "Cambrian."* J. Lownds, director
28	S	1794	Robespierre guillotined. [C.W.S., died, 1895.
29	S	1833	Wilberforce died.
30	M	1898	Prince Bismarck died.
31	Tu	1556	Ignatius Loyola died.

August.

SUNRISE AND SUNSET.

1st	Rises at..	4 24	Sets at.. 7 47	15th	Rises at..	4 46	Sets at.. 7 22
8th	„ ..	4 35	„ .. 7 35	22nd	„ ..	4 57	„ .. 7 8

29th Rises at 5 8. Sets at 6 53.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises 10 58 morn.		Sets 9 24 aft.	15th	Rises 9 4 aft.		Sets 11 1 morn.
8th	„ 5 50 aft.		„ 1 28 morn.	22nd	„ 2 9 morn.	„	5 32 aft.

29th Rises 9 50 morn. Sets 7 53 aft.

First Quarter, 3rd	4 45 aft.	Last Quarter, 17th.....	11 46 morn.
Full Moon, 10th	9 29 „	New Moon, 25th.....	3 52 „

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	W		*Lammas.*
2	Th	1870	Battle of Sedan. [Berlin.
3	F	1899	(4) Unveiling of Schultze-Delitsch monument at
4	S	1873	*Cheshire Branch opened and Leicester Works*
5	S	1876	*Leicester Works First Extension opened.* [*purchased.*
6	M	1809	Lord Tennyson born. Bank Holiday.
7	Tu	1897	*Sydney Depôt commenced.*
8	W	1827	George Canning died.
9	Th	1884	Sir Erasmus Wilson died.
10	F	1831	G. J. Goschen born.
11	S	1863	*Co-operative Wholesale Society enrolled.*
12	S		*9th Sunday after Trinity.*
13	M		*Old Lammas Day.*
14	Tu	1880	*Heckmondwike Boot and Shoe Works commenced.*
15	W	1771	Sir Walter Scott born.
16	Th	1873	*C.W.S. Insurance Fund established.*
17	F	1786	Frederick the Great died.
18	S	1830	Emperor of Austria born.
19	S	1823	Robert Bloomfield died.
20	M	1868	Abergele accident.
21	Tu	1889	W. P. Hemm, director C.W.S., died.
22	W	1800	Rev. Dr. Pusey born.
23	Th	1862	CORNER STONE, BLACKLEY STORE, LAID.
24	F		*St. Bartholomew.*
25	S	1886	*Longton Crockery Depôt op. Chancelot Mill op., 1894.*
26	S	1819	Prince Consort born.
27	M	1816	Algiers bombarded.
28	Tu	1856	Gilbert Abbot A'Beckett, author, died.
29	W	1887	*Heckmondwike Currying Department commenced*
30	Th	1843	Lord Battersea born.
31	F	1688	John Bunyan died.

September.

SUNRISE AND SUNSET.

1st	Rises at..	5 13	Sets at.. 6 46	15th	Rises at..	5 35	Sets at.. 6 14
8th	„ ..	5 24	„ .. 6 30	22nd	„ ..	5 46	„ .. 5 58

29th Rises at 5 58. Sets at 5 42.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises	1 4 aft.	Sets 9 26 aft.	15th	Rises	9 55 aft.	Sets 1 31 aft.
8th	„	5 46 „	„ 4 19 morn.	22nd	„	4 27 morn.	„ 5 1 „

29th Rises 11 54 morn. Sets 8 10 aft.

First Quarter, 2nd	7 55 morn.	Last Quarter, 15th	8 57 aft.
Full Moon, 9th	5 6 „	New Moon, 23rd	7 57 „

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	S		Partridge shooting commences.
2	✠	1871	*Co-operative News* first issued.
3	M	1898	Fall of Omdurman.
4	Tu	1870	French Republic proclaimed.
5	W	1896	"Windward" arrived in Thames.
6	Th	1870	H.M.S. "Captain" foundered.
7	F	1872	Powder explosion at Hounslow.
8	S	1868	SCOTTISH WHOLESALE COMMENCED BUSINESS.
9	✠	1891	William Green, director C.W.S., died.
10	M	1898	Empress of Austria assassinated.
11	Tu	1869	Lady Palmerston died.
12	W	1819	Blucher died.
13	Th	1884	LIFEBOAT "CO-OPERATOR No. 1" presented to
14	F	1857	Delhi taken. [R.N.L.I.
15	S	1873	*Leicester Works commenced.*
16	✠		*14th Sunday after Trinity.*
17	M	1863	PAISLEY MANUFACTURING SOCIETY STARTED.
18	Tu	1854	Battle of Alma.
19	W	1881	President Garfield died.
20	Th	1884	*21st Anniversary of C.W.S., Commemoration of.*
21	F	1832	Sir Walter Scott died.
22	S	1842	Sultan of Turkey born.
23	✠		*15th Sunday after Trinity.*
24	M	1889	(23) Wilkie Collins died.
25	Tu	1860	Earl of Hopetoun born.
26	W	1857	Relief of Lucknow.
27	Th	1880	*London Drapery Department commenced in New*
28	F	1870	Strasburg capitulated. [*Premises, Hooper Square.*
29	S	1884	*Bristol Depôt commenced.*
30	✠	1758	Lord Nelson born.

October.

SUNRISE AND SUNSET.

1st	Rises at..	6 1	Sets at.. 5 38	15th	Rises at..	6 25	Sets at.. 5 6
8th	„ ..	6 13	„ .. 5 22	22nd	„ ..	6 37	„ .. 4 52

29th Rises at 6 49. Sets at 4 38.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises	1 35 aft.	Sets 10 4 aft.	15th	Rises	10 59 aft.	Sets 1 35 aft.
8th	„	5 1 „	„ 6 3 morn.	22nd	„	5 33 morn.	„ 4 4 „

29th Rises 0 13 aft. Sets 9 3 aft.

First Quarter, 1st	9 10 aft.	Last Quarter, 15th	9 50 morn.
Full Moon, 8th	1 18 „	New Moon, 23rd	1 27 aft.

First Quarter, 31st, 8 17 morn.

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	M		*Cambridge Michaelmas Term begins.*
2	Tu	1786	Admiral Keppel died.
3	W	1883	Burnham Beeches made public.
4	Th	1827	Marquis of Ripon born.
5	F	1874	*Durham Soap Works commenced.*
6	S	1884	*Launch of s.s. "Progress."*
7	S	1849	Edgar Allan Poe died.
8	M	1871	Great Fire at Chicago.
9	Tu	1759	Eddystone Lighthouse finished.
10	W	1895	*Loss of s.s. "Unity."*
11	Th	1492	America discovered by Columbus.
12	F	1886	*Launch of s.s. "Federation."*
13	S	1815	Murat shot.
14	S	1872	*C.W.S. Bank Department commenced.*
15	M	1874	Prince Alfred of Edinburgh born.
16	Tu	1834	Houses of Parliament burnt.
17	W	1874	First Hospital Saturday.
18	Th	1826	Last English Lottery.
19	F	1745	Dean Swift died.
20	S	1865	Lord Palmerston died.
21	S	1805	Battle of Trafalgar.
22	M	1890	*Northampton Saleroom opened.* *Cardiff Saleroom*
23	Tu	1869	Earl of Derby died. *[opened, 1891.*
24	W	1852	*Michaelmas Law Sittings begin.*
25	Th		*St. Crispin.*
26	F	1859	"Royal Charter" lost.
27	S	1870	Capitulation of Metz.
28	S		*St. Simon and St. Jude.*
29	M		Hare Hunting begins.
30	Tu	1683	George II. born.
31	W	1882	*Leeds Saleroom opened.* *All Hallows Eve.*

November.

SUNRISE AND SUNSET.

1st	Rises at..	6 54	Sets at..	4 33	15th Rises at..	7 19	Sets at.. 4 10
8th	„ ..	7 7	„ ..	4 20	22nd „ ..	7 31	„ .. 4 1

29th Rises at 7 42. Sets at 3 54.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises 1 45	aft.	Sets 0 0	morn.	15th Rises 0 8	morn.	Sets 1 12 aft.
8th	„ 5 30	„	„ 8 51	„	22nd „ 7 40	„	„ 4 6 „

29th Rises 0 14 aft. Sets 11 51 aft.

Full Moon, 6th	10 59 aft.	New Moon, 22nd	7 17 morn.
Last Quarter, 14th	2 37 morn.	First Quarter, 29th.....	5 35 aft.

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	Th	1882	*Tea and Coffee Department, London, commenced.*
2	F	1887	*London Branch New Warehouse opened–Manufacture of Cocoa and Chocolate commenced.*
3	S	1852	Mikado of Japan born.
4	S	1891	*Wheatsheaf Works, Leicester, opened.*
5	M	1861	HALIFAX INDUSTRIAL SOCIETY INAUGURATED.
6	Tu	1860	Admiral Sir Charles Napier died.
7	W	1801	R. D. Owen, reformer, born.
8	Th	1886	*Trial trip s.s. "Federation."*
9	F	1841	Prince of Wales born.
10	S	1483	Martin Luther born. [Canal, first sod cut, 1887.
11	S	1889	*Longton Depôt new premises opened.* Manchester Ship
12	M	1849	Brunel (Thames Tunnel engineer) died.
13	Tu	1851	Telegraph between England and France completed.
14	W	1844	Abercrombie, metaphysician, died.
15	Th	1871	Stanley discovered Livingstone.
16	F	1891	*Aarhus Branch opened.*
17	S	1858	Robert Owen died.
18	S	1877	Kars captured by the Russians.
19	M	1758	British Museum established.
20	Tu	1869	Suez Canal opened.
21	W	1835	The "Ettrick Shepherd" died.
22	Th	1804	Rochdale Canal opened.
23	F		*St. Clement's.*
24	S	1848	Lord Melbourne died.
25	S	1748	Dr. Watts died.
26	M	1871	*Opening of Newcastle-on-Tyne Branch.*
27	Tu	1833	Duchess of Teck born.
28	W	1814	The *Times* first printed by machinery.
29	Th	1840	Sir J. Crichton Browne born.
30	F		*St. Andrew's Day.*

December.

SUNRISE AND SUNSET.

1st	Rises at..	7 45	Sets at.. 3 53	15th	Rises at..	8 1	Sets at.. 3 49
8th	„ ..	7 54	„ .. 3 50	22nd	„ ..	8 6	„ .. 3 51

29th Rises at 8 8. Sets at 3 56.

RISING, SETTING, AND CHANGES OF THE MOON.

1st	Rises 0 59 aft.		Sets 1 11 morn.	15th	Rises 1 8 morn.		Sets 0 14 aft.
8th	„ 6 21 „		„ 9 25 „	22nd	„ 8 11 „		„ 4 43 „

29th Rises 11 29 morn. Sets 0 18 morn.

Full Moon, 6th	10 38 morn.	New Moon, 22nd	0 1 morn.
Last Quarter, 13th	10 42 aft.	First Quarter, 29th.....	1 48 „

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.
1	S	1844	Princess of Wales born.
2	S	1896	T. E. Webb, director C.W.S., died.
3	M	1882	Archbishop Tait died.
4	Tu	1893	Professor Tyndall died.
5	W	1870	Rome made Italian capital.
6	Th	1882	Trollope, novelist, died.
7	F	1815	Marshal Ney shot.
8	S	1863	Fire at Santiago.
9	S	1608	Milton born.
10	M	1869	Edward Hooson, director C.W.S., died.
11	Tu	1836	Birmingham Riots.
12	W	1889	Robert Browning died.
13	Th	1884	Attempt to blow up London Bridge.
14	F	1861	Prince Consort died.
15	S	1891	Samuel Taylor, director C.W.S., died.
16	S	1714	George Whitefield born.
17	M	1779	Humphrey Davy b'rn. *Oxford Michaelmas Term ends.*
18	Tu	1862	Slavery abolished in the United States.
19	W	1805	Lord Beaconsfield born. *Cambridge Michaelmas*
20	Th	1848	Napoleon elected President. [*Term ends.*
21	F	1888	J. J. B. Beach, director C.W.S., died.
22	S	1880	George Eliot died.
23	S	1812	Samuel Smiles born.
24	M	1863	Thackeray died.
25	Tu		*Christmas Day.*
26	W		*Bank Holiday.*
27	Th	1834	Charles Lamb died.
28	F	1857	Duke of Portland born.
29	S	1809	Rt. Hon. W. E. Gladstone born.
30	S	1885	*C.W.S. Fire, London Tea Department.*
31	M	1882	Gambetta, statesman, died.

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FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Acland, A. H. D.—Education of Co-operators and Citizens	1885	420
Acland, A. H. D.—Secondary Education	1885	426
Adams, The late Mr. John	1900	425
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Agriculture, Co-operative.—By Bolton King	1885	187
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Articles Consumed by Co-operators, The Growth and Manufacture of	1885	146
Art to Labour, The Relations of.—By Wm. Morris	1890	371
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CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Ballot, The	1886	232
Billson, Alfred, M.P.—Taxation of Land Values...	1899	330
B. J., L. B.—Co-operative Wholesale Societies and their Relations to Retail Co-operative Societies...	1896	209
B. J., L. B.—Future Financial Development of the Co-operative Movement	1899	166
B. J., L. B.—Possibilities of International Co-operative Trade	1898	257
B. J., L. B.—Retail Co-operation and the Relations between the Individual and the Store	1896	199
Blatchford, Robert.—Land Nationalisation	1898	241
Boot and Shoe Making: As it Was and As it Is.—By An Old Craft	1889	328
Bradbury, Fred.—The Woollen Industry, Historically and Commercially Considered	1900	253
Branford, Victor V., M.A.—Electricity: Past, Present, Future	1896	253
British Trade, The Course of.—By Geo. Howell, F.S.S., M.P.	1893	210
British Trade, Industrial Conflicts and	1886	285
Burns, John, M.P.—Risks and Casualties of Labour	1899	383
Burt, T., M.P.—Trade Unions and the Working Classes	1885	374
Burton, F. G.—Advantages of Co-operative over Municipal and State Management in Production and Distribution	1897	303
Callie, J. W. S.—War Armaments of Europe	1898	324
Campbell, D.—The Scottish Co-operative Wholesale Society Limited, and its Productive Departments	1896	323
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CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Cattle, Breeding and Feeding of Horses and.—By D. JOHNSON	1888	347
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Colonial Empire and Emigration, Our	1885	243
Colonies Adapted for Permanent Homes	1885	259
Colonies Adapted for Temporary Residence only	1885	322
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Common Lands, The Enclosure of	1885	461
Communities, Ideal.—By W. C. J.	1886	151
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Co-operation as Applied to Agriculture.—By JAMES LONG	1899	409

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Co-operation, Eminent Men on	1887	233
Co-operation: Its Spread and Power.—By T. Swann	1888	125
Co-operation in its Relation to other Forms of Collectivism.—By A. E. Fletcher	1899	224
Co-operation, Retail, and the Relations between the Individual and the Store.—By B. J., L. B.	1896	199
Co-operation, Valuable Opinions on	1888	337
Co-operation *v.* Socialism.—By Prof. P. Geddes	1888	285
Co-operation, Some Aspects of Continental and Colonial.—By the Rev. T. G. Gardiner	1897	499
Co-operation and Currency Reform.—By Michael Flurscheim	1898	210
Co-operative Agriculture.—By Bolton King	1885	187
Co-operative Agriculture Applied to Market Gardening and Fruit Culture.—By the Editor of *The Agricultural Economist*	1885	194
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Co-operative Efforts, Early	1886	86
Co-operative Movement, Future Financial Development of.—By B. J., L. B.	1899	166
Co-operative Production.—By H. Slatter, J.P.	1886	188
Co-operative Societies, Law Cases Affecting.—By Henry Harwood	1895	530
Co-operative, The Advantages of, over Municipal and State Management in Production and Distribution.—By F. G. Burton	1897	303
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Co-operative Wholesale Society, The Productive Departments of the	1892	430
Co-operative Wholesale Society, Progress and Present Position of the	1899	445
Co-operative Wholesale Society, The Scottish, and its Productive Departments.—By D. Campbell.	1896	323

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Co-operative Societies, The System of Credit as practised by.—By J. C. Gray	1889	344
Co-operators, Education of, and Citizens.—By A. H. D. Acland	1885	420
Co-operators, The Growth and Manufacture of Articles Consumed by	1885	146
Cotton Industry, Past, Present, and Prospective, A Sketch of British.—By J. C. Fielding	1887	313
Cotton Kingdom, The New.—By Edward Porritt	1895	241
Cotton Mill Towns of New England.—By Edward Porritt	1900	195
Cows' Milk, On the Production of, and the Diseases Caused by its Use.—By J. Niven, M.A., M.B. (Cantab.)	1897	282
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Currency Reform and Co-operation.—By Michael Flurscheim	1898	210
Dairy Farming in Sweden	1888	277
Dairy Produce, Our Trade in.—By Jas. Long	1892	360
Davies, Rev. T. G.—Co-operation and Education	1888	308
Deans, James.—Private Traders' Anti-Co-operative Movement	1899	269
Distribution, The Advantages of Co-operative over Municipal and State Management in Production and.—By F. G. Burton	1897	303
Distributive Co-operation, One Outcome of	1886	194
Dunckley, Henry, M.A., LL.D.—The English Constitution: Its Origin and Growth	1891	129
Dunckley, Henry, M.A., LL.D.—The South Sea Bubble	1892	243
Dunckley, Henry, M.A., LL.D.—Military and Naval Forces of the World and their Cost	1893	427
Dunckley, Henry, M.A., LL.D.—Stock Exchanges: Their Origin and History	1893	171
Dunckley, Henry, M.A., LL.D.—History and Effects of the Privileged Classes in Civilised Communities	1894	262

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Dunckley, Henry, M.A., LL.D.—Would the Nationalisation of Railways be of Advantage to the Country?	1895	203
Dyer, Henry, C.E., M.A., D.Sc.—Influence of Modern Industry on Social and Economic Conditions	1892	145
Dyer, Henry, C.E., M.A., D.Sc.—Education in Citizenship	1894	286
Eastern Markets, Development of.—By Holt S. Hallett, C.E.	1890	308
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Education of the People, The.—By Rev. J. Hirst Hollowell	1892	319
Education, Primary, in England.—By Dr. J. Watts	1885	393
Education, The Royal Commission on.—By H. Slatter, J.P.	1889	334
Education, Secondary.—By A. H. D. Acland	1885	426
Education, Needs of Secondary.—By H. de B. Gibbins, M.A.	1900	143
Education, Statistics of Expenditure of Public Money on	1885	443
Education, Technical, at Home and Abroad.—By Rev. J. Hirst Hollowell	1894	439
Electricity: Light and Power.—By M. Holroyd Smith, M.I.M.E., M.S.T.E. and E., &c.	1889	204
Electricity: Past, Present, Future.—By Victor V. Branford, M.A.	1896	253
Emigration, The Advantages of.—By G. J. Holyoake	1885	245

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Emigration, Our Colonial Empire and	1885	243
Empire, Can the, Feed its People?—By Professor James Long	1893	595
England, Land Tenure in.—By Professor J. E. Thorold Rogers	1889	167
English Constitution, The: Its Origin and Growth. By H. Dunckley, M.A., LL.D.	1891	129
English Industry up to the Beginning of the Present Century, A Short Outline of the Growth of.—By H. de B. Gibbins, B.A.	1890	273
English Labour, A Century-and-a-half of.—By Professor J. E. Thorold Rogers, M.P.	1885	327
Englishmen in the World of Labour.—By B. J., L. B.	1887	270
Europe and England in Africa; or the Development of the Dark Continent.—By H. de B. Gibbins, M.A., F.R.G.S.	1895	345
Evans, Sparke, J.P.—Leather	1889	322
Everett, R. L., M.P.—Old Age Pensions	1893	464
Evolution and Work of the Scots Parliament, The. By William Wallace, M.A.	1897	331
Factory Legislation in the United States.—By Edward Porritt	1896	180
Factories, Sweating in Indian, and Workshops.—By Holt S. Hallett, C.E.	1891	199
Fibre Supply, The World's.—By J. R. Jackson, A.L.S.	1897	228
Fielding, J. C.—British Cotton Industry; Past, Present, and Prospective, A Sketch of	1887	313
Fisher, W. E. Garrett, M.A.—Coal and Coal Mining	1897	450
Fishing Industries of the United Kingdom.—By Chas. E. Fryer	1893	561
Fletcher, A. E.—Co-operation in its Relation to other Forms of Collectivism	1899	224
Flour, Wheat	1888	332
Flürscheim, Michael.—Currency Reform and Co-operation	1898	210
Food of the People, The.—By T. Oliver, M.A., M.D., F.R.C.P.	1896	147

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Food Products, New, with Suggestions on the Introduction and Cultivation in Britain or the British Colonies of New and Little Known Fruits and Vegetables.—By J. R. JACKSON, A.L.S. Illustrated by J. ALLEN	1895	279
Foreign Trade, The Relative Values of our Home and our.—By T. LLOYD	1895	312
Foreign Competition in the East.—By HOLT S. HALLETT, C.E.	1893	371
Foreign Competition and Its Influence on Home Industries.—By J. A. HOBSON	1899	197
Freedom, Popular, The Birth of, in England.—By W. C. J.	1886	250
French and German Socialism.—By LAURENCE GRONLUND	1886	138
Fruit Culture, Co-operative Agriculture applied to Market Gardening, &c.—By the Editor of *The Agricultural Economist*	1885	194
Fruit-Growing Industry, Our.—By G. T. TURNER.	1889	366
Fryer, Charles E.—Fishing Industries of the United Kingdom	1893	561
Furniture Woods, with Suggestions for the Introduction of New Kinds. –By J. R. JACKSON, A.L.S. Illustrated by J. ALLEN	1894	349
Gardiner, Rev. T. G.—Some Aspects of Continental and Colonial Co-operation	1897	499
Geddes, Prof. Patrick. –Co-operation *v.* Socialism...	1888	285
Geddes, Prof. Patrick.—Geography and History for Economics and Citizenship	1895	485
Geography, Commercial.—By Rev. L. C. CASARTELLI, Ph.D., M.A.	1889	191
Geography and History for Economics and Citizenship.—By Professor PATRICK GEDDES	1895	485
German Socialism, French and.—By LAURENCE GRONLUND	1886	138
Gibbins, H. de B., M.A.—A Short Outline of the Growth of English Industry up to the Beginning of the Present Century	1890	273

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Gibbins, H. de B., M.A.—Sketches from Commercial and Industrial History	1892	279
Gibbins, H. de B., M.A.—The Needs of Secondary Education	1900	143
Glasgow, The Rise and Progress of Industries of. By ROBERT LEGGATT	1891	347
Glasse, Rev. J., M.A., D.D.—Modern Christian Socialism from 1848	1897	172
Glover, T. R.—Insurance, and what is worth knowing about it	1888	264
Government, Local, and Taxation.—By GEORGE HOWELL, F.S.S.	1897	395
Grain Trade, The Position of the World's.—By G. T. TURNER	1888	237
Gray, J. C.—The System of Credit as practised by Co-operative Societies	1889	344
Green, J. E., F.I.C., F.C.S.—Soap	1891	288
Grey, Sir E.—Payment of Members of Parliament.	1892	345
Gronlund, Laurence.—Social Experiments in United States	1886	116
Gronlund, Laurence.—Socialism, French and German	1886	138
Gums, Resins, Balsams, and Rubbers.—By J. R. JACKSON. Illustrated by J. ALLEN	1899	297
Hallett, Holt S., C.E.—Development of Eastern Markets	1890	308
Hallett, Holt S., C.E.—Sweating in Indian Factories and Workshops	1891	199
Hallett, Holt S., C.E.—Foreign Competition in the East	1893	371
Hallett, Holt S., C.E.—India and its Neighbours	1895	378
Hallett, Holt S., C.E.—Indian Taxation: Ancient and Modern	1897	254
Harvey, J. W.—Inland Navigation	1888	127
Harwood, Henry.—Law Cases Affecting Co-operative Societies	1895	530
Health and Long Life, Sanitation.—By H. PITMAN.	1896	374
Hewins, W. A. S.—The National Debt: Its Origin, Growth, and the Methods which have been Adopted from time to time for its Reduction	1889	227

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Hibbert, The late Emanuel	1896	416
Hines, G.—Twelve Years of School Work in Ipswich	1885	411
Hines, G.—Co-operation in its Application to Agriculture	1887	210
History of Milling.—By R. WITHERINGTON	1887	304
History, Geography and, for Economics and Citizenship.—By Professor PATRICK GEDDES	1895	485
Hobson, J. A.—The Problem of the Unemployed	1896	351
Hobson, J.A.—Foreign Competition and its Effects on Home Industries	1899	197
Hollowell, Rev. J. Hirst.—The Education of the People	1892	319
Hollowell, Rev. J. Hirst.—Technical Education at Home and Abroad	1894	439
Holyoake, G. J.—The Advantages of Emigration	1885	245
Home and Our Foreign Trade, The Relative Values of our.—By T. LLOYD	1895	312
Horses and Cattle, Breeding and Feeding of.—By D. JOHNSON	1888	347
Hosiery Trade, The.—By ANTHONY MUNDELLA	1893	479
Housing of the Working Classes	1886	203
Howell, George, F.S.S., M.P.—Trade Unions: Their Origin, Rise, Progress, and Work	1885	352
Howell, George, F.S.S., M.P.—Great Strikes: Their Origin, Cost, and Results	1889	266
Howell, George, F.S.S., M.P.—Fluctuations in Commerce and Trade	1890	161
Howell, George, F.S.S., M.P.—Pauperism: Its Nature and Extent, its Causes and Remedies	1890	187
Howell, George, F.S.S., M.P.—Industrial London.	1891	163
Howell, George, F.S.S., M.P.—Rich Richer and the Poor Poorer: An Essay on the Distribution of Wealth	1892	191
Howell, George, F.S.S., M.P.—The Course of British Trade	1893	210
Howell, George, F.S.S. M.P.—A Century of Industrial and Social Legislation	1894	198
Howell, George, F.S.S., M.P.—Charities and their Administration	1895	175
Howell, George, F.S.S., M.P.—Taxation: How Raised and how Expended	1896	232

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Howell, George, F.S.S., M.P.—Local Government and Taxation	1897	395
Hughes, Thos., Q.C.—Rugby Tennessee	1885	254
Hughes, the late Judge	1897	511
Ideal Communities.—By W. C. J.	1886	151
India and its Neighbours.—By Holt S. Hallett, C.E.	1895	378
Indian Factories and Workshops, Sweating in.—By Holt S. Hallett, C.E.	1891	199
Indian Taxation, Ancient and Modern.—By Holt S. Hallett, C.E.	1897	254
Industrial Conflicts and British Trade	1886	285
Industrial History, Sketches from Commercial.—By H. de B. Gibbins, M.A.	1892	279
Industrial Progress, The Recent History of.—By R. S. Watson	1891	308
Industrial and Provident Societies: The Legislation Relating thereto.—By E. V. Neale	1887	344
Industrial London.—By George Howell, F.S.S., M.P.	1891	163
Industrial and Social Legislation, A Century of.—By George Howell, F.S.S., M.P.	1894	198
Industrial Mortality, Some Aspects of.—By Vaughan Nash	1894	314
Industries of Glasgow, The Rise and Progress of. By Robert Leggatt	1891	347
Industries, Fishing, of the United Kingdom.—By Charles E. Fryer	1893	561
Industry, English, up to the beginning of the Present Century, A Short Outline of the Growth of.—By H. de B. Gibbins, M.A.	1890	273
Industries, Foreign Competition and its Influence on Home.—By J. A. Hobson	1899	197
Influence of Modern Industry on Social and Economic Conditions.—By H. Dyer, C.E., M.A., D.Sc.	1892	145
Influence of the Production of the Precious Metals on Industry and Trade, The.—By Professor J. S. Nicholson, M.A., D.Sc.	1895	456

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Influence of the Land Laws upon the Prosperity of the People.—By Professor JAMES LONG	1895	422
Inland Navigation.—By J. W. HARVEY	1888	127
Insurance, and what is worth knowing about it.—By T. R. GLOVER	1888	264
International Co-operative Trade, The Possibilities of.—By B. J., L. B.	1898	257
Irish Creameries.—By W. L. STOKES	1897	419
Irlam Soap Works	1896	388
Jackson, J. R., A.L.S.—Tea, Coffee, and Cocoa	1893	339
Jackson, J. R., A.L.S.—Furniture Woods, with Suggestions for the Introduction of New Kinds.	1894	349
Jackson, J. R., A.L.S.—New Food Products, with Suggestions on the Introduction and Cultivation in Britain or the British Colonies of New and Little Known Fruits and Vegetables	1895	279
Jackson, J. R., A.L.S.—The World's Fibre Supply.	1897	228
Jackson, J. R., A.L.S.—Tobacco, its History, Culture, and Uses	1898	183
Jackson, J. R., A.L.S.—Gums, Resins, &c.	1899	297
Jackson, J. R., A.L.S.—Sugar, Botanically and Commercially Considered	1900	391
Johnson, D.—Breeding and Feeding of Horses and Cattle	1888	347
King, Bolton.—Co-operative Agriculture	1885	187
Knights, J. M., F.S.S.—Railway Rates and Charges	1900	357
Kropotkin, P.—What Man can Obtain from the Land.	1897	358
Labour, Relations of Art to.—By WM. MORRIS	1890	371
Labour Statistics, Articles from Bureau of	1886	218
Labour, Risks and Casualties of.—By JOHN BURNS, M.P.	1899	383
Land Laws, Influence of the, upon the Prosperity of the People.—By Professor JAMES LONG	1895	422

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Land and the People, The.—By ARTHUR ARNOLD...	1887	184
Land Nationalisation.—By A. J. OGILVY.....	1890	131
Land Nationalisation.—By ROBERT BLATCHFORD...	1898	241
Land Tenure in England.—By Professor J. E. THOROLD ROGERS	1889	167
Land, What Man can Obtain from the.—By P. KROPOTKIN	1897	358
Land Values, Taxation of.—By A. BILLSON	1899	330
Lands, The Enclosure of Common	1885	461
Laurie, Professor S. S.—The University and the People, and the University of the Future	1894	380
Law Cases Affecting Co-operative Societies.—By HENRY HARWOOD	1895	530
Leather.—By SPARKE EVANS, J.P.	1889	322
Law, The History of the Poor.—By GRAHAM WALLAS.	1894	262
Leggatt, Robert.—The Rise and Progress of the Industries of Glasgow	1891	347
Legislation, Factory, in the United States.—By EDWARD PORRITT.....	1896	180
Legislation, Industrial and Provident Societies.—By E. V. NEALE.....	1887	344
Legislation, A Century of Industrial and Social.—By G. HOWELL, F.S.S., M.P.	1894	198
Legislation, For Direct.—By A. M. THOMPSON	1900	311
Lloyd, T.—The World's Accumulation of Capital ..	1893	507
Lloyd, T.—The Relative Values of our Home and our Foreign Trade.....	1895	312
Local Government and Taxation.—By GEORGE HOWELL, F.S.S., M.P.	1897	395
London, Industrial.—By GEORGE HOWELL, F.S.S., M.P.....	1891	163
London School Board.—By the Hon. E. LYULPH STANLEY, M.P.	1885	404
Long, Professor James.—The Sources of our Meat Supply.....	1891	380
Long, Professor James.—Can the Empire Feed its People?	1893	595
Long, Professor James —Soil, and What it will Grow	1894	397
Long, Professor James.—Influence of the Land Laws upon the Prosperity of the People.....	1895	422
Long, Professor James.—Co-operation as Applied to Agriculture.....	1899	409

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Long Life, Sanitation, Health, and.—By H. PITMAN.	1896	374
Lownds, The late James	1896	415
Machinery and Industry, The Possibilities of, and Some of their Probable Results on Social and Economic Conditions	1893	301
Machinery, Shoe: Its Effects on Wages and Cost of Production.—By AN OLD CRAFT	1890	383
Macneill, T. G. Swift, Q.C., M.P.—Company Frauds and Parliamentary Inactivity	1900	169
Macrosty, H. W., B.A.—Association *v.* Competition	1900	223
Manchester School Board.—By HENRY SLATTER, J.P.	1885	405
Manchester Ship Canal, An Account of the Origin and Development of the	1889	389
Marshall, Alfred.—Theories and Facts About Wages	1885	379
Maxwell, Wm., J.P.—The late John Thomas Whitehead Mitchell, J.P.	1896	392
Meat Supply, The Sources of Our.—By Professor JAMES LONG	1891	380
Melbourne and its District.—By W. NUTTALL	1888	194
Members of Parliament, Payment of.—By Sir E. GREY	1892	345
Members of Parliament, Payment of: A Historical Note.—By A. H. WORTHINGTON	1893	555
Merchant Shipping Bill, The	1885	239
Merchant Shipping, Sketch of the Rise and Progress of	1885	198
Military and Naval Forces of the World and their Cost.—By H. DUNCKLEY, M.A., LL.D.	1893	427
Milling, History of.—By R. WITHERINGTON	1887	304
Mining Royalties.—By Professor J. E. C. MUNRO	1891	269
Mitchell, J.P., the late John Thomas Whitehead.—By WM. MAXWELL, J.P.	1896	392
Modern Christian Socialism from 1848.—By the Rev. J. GLASSE, M.A., D.D.	1897	172
Money.—By Professor J. S. NICHOLSON	1887	137
Mortality, Some Aspects of Industrial.—By VAUGHAN NASH	1894	314

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Morris, Wm.—Relations of Art to Labour	1890	371
Mundella, Anthony.—The Hosiery Trade	1893	479
Municipal Socialism, Some Facts and Considerations about.—By SYDNEY WEBB, LL.B.	1896	286
Municipal and State Management in Production and Distribution, The Advantages of Co-operative over.—By F. G. BURTON	1897	303
Munro, J. E. C.—Mining Royalties	1891	269
Nash, Vaughan.—Some Aspects of Industrial Mortality	1894	314
Nation, The Railways for the.—By G. H. PERRIS, F.S.S.	1898	283
National Debt, The: Its Origin, Growth, and the Methods which have been Adopted from time to time for its Reduction.—By W. A. S. HEWINS	1889	227
National Expenditure Accounts and Audits.—By W. E. SNELL	1888	315
Nationalisation, Land.—By A. J. OGILVY	1890	131
Nationalisation, Land.—By ROBERT BLATCHFORD.	1898	241
Nationalisation, Would the, of Railways be of Advantage to the Country?—By H. DUNCKLEY, M.A., LL.D.	1895	203
Naval, Military and, Forces of the World, and their Cost.—By H. DUNCKLEY, M.A., LL.D.	1893	427
Navigation, Inland.—By J. W. HARVEY	1888	127
Neale, E. V.—The Legislation Relating to Industrial and Provident Societies	1887	344
New Food Products, with Suggestions on the Introduction and Cultivation in Britain or the British Colonies of New and Little Known Fruits and Vegetables.—By J. R. JACKSON, A.L.S. Illustrated by J. ALLEN	1895	279
Newman, P. L., B.A., F.I.A.—Superannuation	1898	349
Nicholson, Professor J. S., M.A., D.Sc.—Money	1887	137
Nicholson, Professor J. S., M.A., D.Sc.—The Influence of the Production of the Precious Metals on Industry and Trade	1895	456

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Niven, J., M.A., M.B. (Cantab.)—On the Production of Cows' Milk and the Diseases Caused by its Use	1897	282
Nuttall, W.—Melbourne and its District	1888	194
Ogilvy, A. J.—Land Nationalisation	1890	131
Old-Age Pensions.—By R. L. EVERETT, M.P.	1893	464
Oliver, T., M.A., M.D., F.R.C.P.—The Food of the People	1896	147
On the Production of Cows' Milk and the Diseases Caused by its Use.—By J. NIVEN, M.A., M.B. (Cantab.)	1897	282
Parliament, The Evolution and Work of the Scots. By WILLIAM WALLACE, M.A.	1897	331
Pauperism: Its Nature and Extent, its Causes and Remedies.—By GEORGE HOWELL, F.S.S., M.P.	1890	187
Payment of Members of Parliament.—By Sir E. GREY	1892	345
Payment of Members of Parliament: A Historical Note.—By A. H. WORTHINGTON	1893	555
Pensions, Old-Age.—By R. L. EVERETT, M.P.	1893	464
People, Influence of the Land Laws upon the Prosperity of the.—By Professor JAMES LONG	1895	422
People, The Land and the.—By ARTHUR ARNOLD	1887	184
People, The University and the, and the University of the Future.—By Professor S. S. LAURIE	1894	380
Perris, G. H., F.S.S.—The Railways for the Nation	1898	283
Phonography, Spelling Reform and.—By H. PITMAN	1890	236
Piggott, A. E., F.S.A.A.—Silk: Its History and its Industries	1893	686
Pitman, Henry.—Spelling Reform and Phonography	1890	236
Pitman, Henry.—Sanitation, Health, and Long Life	1896	374
Political Economy, The Working Classes and	1886	279
Poor Law, The History of the.—By GRAHAM WALLAS	1894	262

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Poor Poorer, Rich Richer and the: An Essay on the Distribution of Wealth.—By GEO. HOWELL, F.S.S., M.P.	1892	191
Popular Discontent	1886	80
Popular Freedom in England, The Birth of.—By W. C. J.	1886	250
Popular Power: A People's Party	1886	238
Porritt, Edward.—American Immigration Laws	1894	171
Porritt, Edward.—The New Cotton Kingdom	1895	241
Porritt, Edward.—Factory Legislation in the United States	1896	180
Porritt, Edward.—American Tariffs	1897	202
Porritt, Edward.—Canada in 1898	1899	356
Porritt, Edward.—Cotton Mill Towns of New England	1900	195
Possibilities of International Co-operative Trade, The.—By B. J., L.B.	1898	257
Possibilities of Machinery and Industry, and some of their Probable Results on Social and Economic Conditions, The	1893	301
Printing, The Origin and Growth of the Art of.—By H. SLATTER, J.P.	1893	285
Privileged Classes in Civilised Communities, The History and Effects of.—By H. DUNCKLEY, M.A., LL.D.	1894	262
Production, Co-operative.—By HENRY SLATTER, J.P.	1886	188
Production of Cows' Milk, On the, and the Diseases Caused by its Use.—By J. NIVEN, M.A., M.B. (Cantab.)	1897	282
Production, The Influence of the, of the Precious Metals on Industry and Trade.—By Professor J. S. NICHOLSON, M.A., D.Sc.	1895	456
Production and Distribution, The Advantages of Co-operative over Municipal and State Management in.—By F. G. BURTON	1897	303
Productive Departments of the C.W.S., The	1892	430
Productive Departments, The Scottish Co-operative Wholesale Society Limited and its.—By D. CAMPBELL	1896	323
Progress of Society, The	1886	77
Progress and Present Position of the C.W.S.	1899	445

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Progress, The Recent History of Industrial.—By R. S. WATSON	1891	308
Prosperity of the People, The Influence of the Land Laws upon the.—By Professor JAMES LONG	1895	422
Provident, Industrial and, Societies: The Legislation Relating thereto.—By E. V. NEALE	1887	344
Railways for the Nation, The.—By G. H. PERRIS, F.S.S.	1898	283
Railways, Would the Nationalisation of, be of Advantage to the Country?—By H. DUNCKLEY, M.A., LL.D.	1895	203
Railway Rates and Charges.—By J. M. KNIGHTS, F.S.S.	1900	357
Rating	1889	312
Rating System, Some Recent Modifications of Our. By WM. J. WILLIAMS	1899	249
Referendum in the United Kingdom, The Case Against the, with Special Reference to the United Kingdom.—By LILIAN TOMN	1900	337
Retail Co-operation and the Relations between the Individual and the Store.—By B. J., L. B.	1896	199
Rich Richer and the Poor Poorer: An Essay on the Distribution of Wealth.—By G. HOWELL, F.S.S., M.P.	1892	191
Rings, Trusts, and Syndicates.—By W. E. SNELL	1890	209
Risks and Casualties of Labour.—By JOHN BURNS, M.P.	1899	383
Ritchie, David G., M.A.—Civic Duties	1898	163
Roberts, R. D.—Culture	1885	424
Rochdale School Board	1885	407
Rochdale Society of Equitable Pioneers, First Rules of the	1895	544
Roden Estate of C.W.S.	1900	421
Rogers, Professor J. E. Thorold.—Land Tenure in England	1889	167
Royal Commission on Education, The.—By H. SLATTER, J.P.	1889	334
Royalties, Mining.—By Professor J. E. C. MUNRO.	1891	269
Rugby Tennessee.—By THOS. HUGHES, Q.C.	1885	254

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Sanitation, Health, and Long Life.—By H. PITMAN	1896	374
Sanitation, The Economic Aspect of	1888	182
School Board, London.—By the Hon. E. LYULPH STANLEY, M.P.	1885	404
School Board, Manchester.—By HENRY SLATTER, J.P.	1885	405
School Board, Rochdale	1885	407
School Board, Sheffield.—By THOS. SWANN	1885	409
School Work in Ipswich, Twelve Years of.—By G. HINES	1885	411
Scots Parliament, The Evolution and Work of the. By WILLIAM WALLACE, M.A.	1897	331
Scottish Wholesale Societies, The Advantages and Necessity of a Co-operative Wholesale Centre of Supply, as Established in the Organisation of the English and.—By H. R. BAILEY	1889	377
Scottish Co-operative Wholesale Society Limited, The, and its Productive Departments.—By D. CAMPBELL	1896	323
Shoe Machinery: Its Effect on Wages and Cost of Production.—By AN OLD CRAFT	1890	383
Silk: Its History and its Industries.—By A. E. PIGGOTT, F.S.A.A.	1893	686
Slagg, John, M.P.—Technical Instruction	1885	413
Slatter, Henry, J.P.—School Board, Manchester	1885	405
Slatter, Henry, J.P.—Co-operative Production	1886	188
Slatter, Henry, J.P.—The Royal Commission on Education	1889	334
Slatter, Henry, J.P.—The Origin and Growth of the Art of Printing	1893	285
Smith, M. Holroyd, M.I.M.E., M.S.T.E., and E., &c. Electricity: Light and Power	1889	204
Snell, W. E.—Rings, Trusts, and Syndicates	1890	209
Soap.—By J. E. GREEN, F.I.C., F.C.S.	1891	288
Soap Works, Irlam	1896	388
Social Legislation, A Century of Industrial and.—By GEORGE HOWELL, F.S.S., M.P.	1894	198
Social and Economic Conditions, Influence of Modern Industry on.—By HENRY DYER, C.E., M.A., D.Sc.	1892	145
Social Experiments in the United States.—By LAURENCE GRONLUND	1886	116

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1900.

Title of Article.	"Annual."	Page.
Socialism, Co-operation *v.*—By Professor Patrick Geddes	1888	285
Socialism: French and German.—By Laurence Gronlund	1886	138
Socialism, Modern Christian, from 1848.—By the Rev. J. Glasse, M.A., D.D.	1897	172
Society, The Progress of	1886	77
Soil, and What it will Grow.—By Professor James Long	1894	397
South Sea Bubble, The.—By Henry Dunckley, M.A., LL.D.	1892	243
Spelling Reform and Phonography.—By Henry Pitman	1890	236
Stanley, Hon. E. Lyulph, M.P.—School Board, London	1885	404
Statistics of Trade Unions	1885	360
Statistics, Articles from Bureau of Labour	1886	218
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Title of Article.	"Annual."	Page.
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